LODZ CREATES INNOVATION

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NO. 2/2014

BIONANOPARK AND ITS ADVANTAGES

GROUND-BREAKING SCIENCE

IT SPECIALIST NEEDED

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OFF PIOTRKOWSKA TRENDS



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ANNA KRAWCZYK, EDITOR-IN-CHIEF

he research activity is a tool for an innovative economy. The companies which have noticed that develop perfectly. They build their position and a sustainable advantage over others on the basis of new solutions, products and services. According to Leszek Grabarczyk, the Vice-Director of the National Centre for Research and Development, the biggest breakthrough will be in medicine. If we take a look at the development of biotechnology, we can already see the harbingers, both in the global presentation as well as from the perspective of the city of Lodz. There, BioNano-Park has its headquarters and is now one of the largest laboratory complexes for the biotechnology industry. In the City of Lodz, Mabion and Proteon Pharmaceuticals have carried out their businesses. There is a reason why we devote so much attention to this issue. It so happens that, on 28-29 May, nowhere else but in Lodz, there will be the 13th edition of Bioforum. Please refer to www.cebioforum.com for further details.

Lodz has manifested its significant global presence on the Polish IT map for a long time. With the establishment of the ICT Central Poland cluster in 2012, the IT market and job opportunities for IT professionals are well penetrated. The cluster was established on the initiative of the Technical University of Lodz, which acts as a coordinator. The stakeholders from the information technology and telecommunications have been invited to cooperate. The purpose of their operation is not only to develop the technologies but also to support the companies in the ICT sector. The resulting benefit is the adjustment of the curricula of the Lodz University of Technology to the market requirements. This idea is implemented by many entrepreneurs, including the Webwerx company. A few years ago, the company's founder took part in the 'Youth in Lodz – I have an idea for business' competition and, one year later, he joined the employers participating in the programme.

Another event that we want to invite you for is the tenth edition of FashionPhilosophy Fashion Week Poland. Undoubtedly, this is an important event in the world of fashion designers not only in Poland but also in the world. On 6–10 May, you have to be in Lodz. The meeting place is EXPO-Lodz. Continuing the subject of creative industries... there is a place in Lodz, where we are happy to return. We are talking about OFF Piotrkowska. In place of the former cotton factory of Francis RAMISCH, many entrepreneurs have established their businesses. There you can find a countless number of art studios, boutiques with interesting collections of clothes and jewellery, as well as many cafes and restaurants. Whenever I am in Lodz, I cannot resist the temptation to visit this place.

Therefore, let's meet in Lodz. Your place and time.

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Ground--breaking science

THE DEVELOPMENT OF SCIENCE AND THE PLACE OF POLAND AND LODZ IN THE WORLD INNOVATION RANKINGS ARE THE TOPICS DISCUSSED BY LESZEK GRABARCZYK. VICE-DIRECTOR OF THE NATIONAL CENTRE FOR RESEARCH AND DEVELOPMENT, ANNA KRAWCZYK AND JAROSŁAW ZARADKIEWICZ.

Where is science going? Which direction will be chosen by humanity?

Science has its own rules, and one of them is - next to continuity - its unpredictability. Scientists define different visions of the future supported by previous research results, but they can never say with certainty what will happen. Fascinating results of research teams from different areas and disciplines show that we still learn and discover new phenomena. In my opinion, it is certain only that we will be increasingly accompanied by advanced technologies. We understand more and more, and we are able to do more.

Let's reduce the prospect. What can be surprising for us, ordinary people, in 10 years? Something that even today we do not expect?

With today's pace of technology and its increasingly higher degree of sophistication, 10 years remains a distant prospect. Scientists are constantly working on new technologies and materials, while exploring further opportunities and applications for those that have already been used. For example, until recently, we have only talked about graphene. Now we not only produce it for the needs of the industry. It has turned out to have properties allowing to use it not only as an electronic material. In both of these issues, Poles indeed belong to the top world leaders in this regard.

In which field of science will the biggest breakthrough be? In medicine, thanks to technological advance, among

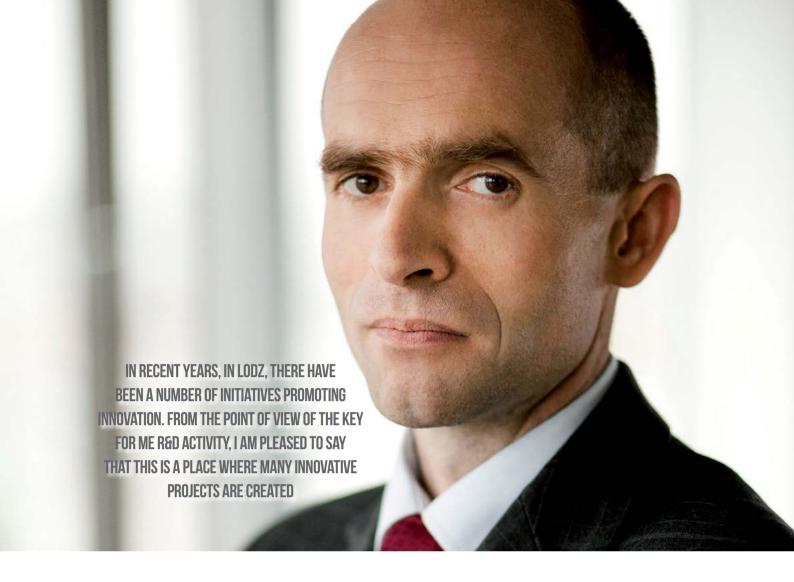
others, through the development of biotechnology and nanotechnology. Such conclusions arise from, among others, IBM expert forecasts concerning the next 5 years.

Biotechnology and nanotechnology - are they technologies of the future?

Certainly so. This defines the development of science throughout the world. In Poland, it is a relatively young field, but we can witness the growing research and development activity in this sector.

Innovative economy - what kind of economy is it and what is characteristic of it?

It is an economy that properly utilizes sources of innovation – including research and development (R&D) activity - it is building its position and a sustainable



advantage over other entities on the basis of new solutions, products and services. But we remember that we talk about innovation only when it is implemented. Invention, patent or suitable material technology resources are not enough. That is why the transfer of knowledge to the economy and commercialisation of research and development works are so important.

What potential do Polish R&D centres have?

In Poland, we have a lot of great research teams and – thanks to the investment of more than 27 billion from the EU funds in recent years – a modern, high level research and development infrastructure. Many Polish scientists acquire (or have already done so) experience when participating in international research projects. Polish scientists are able to be creative and innovative. They are leaders of research, as evidenced by the previously mentioned example of graphene. We have good capacity, and it needs only to be utilized.

And do we use it fully?

As far as I understand, it concerns benefits to the economy. We could fully use it when we had unlimited

human, material and financial resources. But it is no longer the case. It should be remembered that the success of cooperation between science and business is primarily determined by the ability to use the work of scientists in support of entrepreneurs. To achieve this, scientists should be more open to the demand from business, should determine with the entrepreneurs the direction and scope of the research work while having in mind future commercialisation. The latter ones, in turn, should rely more on R&D. This does not only mean funding. It is also a change from short to medium and eventually long-term thinking and timing. This is the only way to gain a sustainable advantage in the market.

It is often cited that research and development were regarded as the domain of the academic world. Is it really true?

Research and development works can be carried out at higher education institutions, research institutes, as well as R&D departments of companies. In Poland, there are not too many companies with their own large research and development department as is the

SCIENCE HAS ITS OWN RULES, AND ONE OF THEM IS — NEXT TO CONTINUITY — ITS UNPREDICTABILITY

case with our successful beneficiaries: Solaris or Pesa. In most cases, entrepreneurs are simply not willing to take the risk. Many of them still lack information about the benefits the transfer of knowledge from science to economy can bring. However, as shown by our statistics, they are more and more involved in financing R&D, and scientists are increasingly implementing their projects in cooperation or even on the order of business. The number of scientific and industrial consortia involved in the projects funded by the Centre is sharply increasing. In 2011, there were slightly more than 20 agreements concluded with consortia involving entrepreneurs. At the end of 2013, we were already close to 700.

What should the transfer of science to business look like? The combination of two worlds: academic and business is not yet a simple task...

This challenge was faced by many countries, and we – by using the best experiences – can achieve success in this field. We often forget that many most innovative (e.g., Israel, South Korea or Finland) countries, until a few years ago, had no success when it comes to technology transfer. The key to success is to achieve a balance between the supply on the side of the world of science and the demand on the side of the industry.

NRDC has introduced funding mechanisms facilitating the achievement of this objective. Please bring this matter closer to our readers.

With respect to specific sectors, this aim is achieved by sector programmes and joint ventures, in which we require entrepreneurs to have their own contribution at the level of 40–50%. In the NRDC competitions, we reward the applications submitted by researchers together with entrepreneurs. Additional points are granted to the projects with own contributions, higher than

IN POLAND, WE HAVE A LOT OF GREAT RESEARCH
TEAMS AND — THANKS TO THE INVESTMENT
OF MORE THAN 27 BILLION FROM THE EU FUNDS
IN RECENT YEARS — A MODERN, HIGH LEVEL
RESEARCH AND DEVELOPMENT
INFRASTRUCTURE

those required by the provisions. Owing to the co-operation with the Polish Aviation Technology Platform (programme for aviation industry – INNOLOT) and the Polish Innovative Medicine Platform (programme for medical industry – INNOMED), we were able to develop a model cooperation between science and business. In turn, along with KGHM Polska Miedź SA, we implement the project in which we fund innovative research in non-ferrous metals industry by allocating PLN 100 million for this purpose.

We were also able to deal with the equity gap problem that affects most innovative projects by drastically reducing commercialisation of high-tech projects in Poland. Thanks to the involvement of venture capital funds within the family of Bridge programmes, we introduced a ground-breaking way of supporting R&D projects with a high degree of investment risk.

What about the commercialisation of research? On what scale are scientific projects implemented in Poland put into production?

The specificity of R&D sector is that projects are implemented for many years, and their results often become evident in the medium or long term. Implementation of new technology consists, in the first place, in conducting intensive, long-term research, and only later in the transfer of new solutions to the economy. Most technologies supported by the NRDC are in progress, and the results will be announced in a few years. When observing the increasing involvement of entrepreneurs and having better prepared scientists, who are ready to execute orders and funds from business, I am not worried about the effects.

Is Lodz an innovative city? Does it stand out from other agglomerations?

In recent years, in Lodz, there have been a number of initiatives promoting innovation. From the point of view of the key for me R&D activity, I am pleased to say that this is a place where many innovative projects are created. I will refer again to the example of the graphene. Lodz scientists, together with colleagues from other universities and entrepreneurs, conduct ground-breaking research into this unique material. At the same time, they focus on new applications: innovative inks and printing pastes, ultrafast photodetectors or nanocomposites for reversible hydrogen storage. At the beginning of the conversation, you asked me about a vision of the future... The last project may revolutionise the automotive industry. Who knows, maybe in 10 years it will take place in Lodz?

Thank you for the interview.



A MODERN AND INNOVATIVE ECONOMY CANNOT EXIST WITHOUT THE CONTINUOUS DEVELOPMENT OF PRODUCTS AND RELIABLE RESEARCH. CLEARLY, THEY ARE EXTREMELY EXPENSIVE, AND IN ADDITION REQUIRE SPECIALISED EQUIPMENT AND EXPERIENCED STAFF. THANKS TO THE USE OF MONEY FROM THE EUROPEAN UNION, MANY COMPANIES CAN COPE WITH SUCH OBSTACLES.

he potential of the Polish economy is small and medium-sized innovative companies. A big plus is also our human capital. Experienced investigators and the students gaining knowledge under the investigators' supervision are able to meet the challenges posed by the contemporary market. However, they often lacked the possibility to use the latest research equipment.

Until recently, the worlds of science and business were distant from each other. Now their cooperation is stronger. Scientists pay more attention to the commercialisation of their research, and entrepreneurs have learned to use the opportunities offered by student hostels. An example of such a cooperation is Bio-NanoPark, operating in the Lodz Regional Park of Science and Technology, commonly called TechnoPark. It is managed by the company in which 77% of shares are owned by the City of Lodz, 21% by the Marshall's Office, and by the partners, among others, the University of Lodz, the Lodz University of Technology and the Medical University.

INNOVATIVE START

In Poland, 13 technology parks were established within the framework of the Innovative Economy programme. Only three

of them, including Lodz, have a bio-nanotechnological profile. Lodz TechnoPark was established in 2003 and BioNanoPark was opened in October 2012. The building of this research and implementation centre cost nearly PLN 80 million. The European Union contributed more than PLN 50 million to this undertaking. The project impresses with its impetus, and the pace of construction was also impressive. The works were completed a year ahead of the schedule. BioNanoPark is now one of the largest laboratory complexes for the industry of biotechnology. The centre includes two modern laboratories. The aim of the Laboratory of Molecular and Nanostructural Biophysics is the development and commercialisation of new environmentally friendly technologies, such as microbiological technologies of biodegradation of pollutants and toxic substances. In the Laboratory of Industrial Biotechnology, the impact of new biomaterials and nanotechnology products with cells, tissues and body fluids, will be investigated, with special focus on potential risks and benefits arising from nanostructures entering into the environment.

BioNanoPark laboratories can conduct research, among others for: pharmaceutical, cosmetic, chemical, food, textile, power and medical industries.



At BioNanoPark, professional personnel is working. It comes mostly from Lodz universities. The laboratories are equipped with the latest research equipment in Poland. The reason for its selection is that a given product could be comprehensively tested at each stage of its creation and introduction to the market. The devices available to researchers in the Lodz facility may be envied both by the leading companies and research centres.

The building also has 50 new offices for Lodz Technology Incubator, which is home to the companies operating in modern industries, i.e. information technology, renewable energy sources, production of therapeutic equipment and materials, as well as technologies for medical and textile industry. The users of the Incubator, apart from easier access to research, can rely on legal support in the field of law, accountancy, marketing and promotion available on the Lodz TechnoPark website.

At TechnoPark, before opening BioNanoPark Laboratory, the Individual Medical Implant Laboratory was established. It is widely thought that the laboratory is a jewel in the crown COOPERATION AND ORDERS BioNanoPark, shortly after its opening, began to pursue its first research. The Lodz centre has also established coope-

biological systems and living organisms

or their components to make or modify

products or processes for specific use.

Bionanotechnology is a branch of nano-

opment and testing of individual atoms

and biochemistry. It mainly deals with

and molecules) on the border of biology

the study of existing nanostructures and

allows their use on an industrial scale. It

is also often used to describe multidisci-

of the Lodz centre. It cooperates, among others, with Nicolaus

Copernicus Hospital and makes the implants of human skele-

tal system, individually dedicated and designed 'to fit' particu-

plinary research techniques.

technology (the technology of devel-

first research. The Lodz centre has also established cooperation with Biopark Charleroi Brussels South. The Park in Brussels was founded in 1999 by the University of Brussels with the support of the Government of the Walloon Region and the European Union. It initiates a lot of patent

lar patients.

Aneta Gocek, the owner of W4E, the Centre for Wind Energy



If I had to decide where to locate our headquarters once again, the decision would be the same: TechnoPark.

First of all, we have used accounting, legal and marketing support services offered by TechnoPark to budding entrepreneurs. This allowed me to focus on the main objective of the company's activities and development. Another important element is fully equipped, comfortable office in the modern building. What is important it that, thanks to the EU funds, granted in the form of de minimis aid in the early years of the operation of the company, the companies can count on preferential rental rate. It is worth remembering that the office located in such an attractive building adds to the company's prestige in its dealings with customers. That is why we use it today in spite of the fact that a period of W4E incubation ended a few years ago.

What is invaluable to us is interactions with people that we meet there: other companies and the employees of Techno-Park. We exchange experience with the entities in the field of business operation and establish a direct cooperation. The employees are always ready to lend support in the legal and accounting, marketing and public relations areas, as well as organise free trainings. To sum up – it is really worth starting developing companies at TechnoPark.

W4E Centre for Wind Energy operates in the renewable energy sector. The company specialises in the design of wind and photovoltaic turbines. W4E carries out a comprehensive investment service ranging from the choice of optimal location and the implementation of environmental procedure to obtaining a building permit and building a windmill or photovoltaic farm.

procedures, educates students in biochemistry, molecular and cell biology, as well as cooperates with companies. Belgian scientists, among others, examine the causes of cancer, AIDS and diabetes. They deal with immunology, transplantation cell therapy and research on the substances strengthening vaccines. There, new protective vaccines are also developed. The scientists from Brussels will commission the implementation of research in Lodz as they are not able to perform it themselves. In turn, BioNanoPark will be able to use the facilities at Brussels Park.

After nearly half a year of operation, BioNanoPark received from Lodz Biotechnology company the order worth PLN 1 million for developing innovative and effective methods of disposal of molassed waste, created, among others, during the production of yeast, ethanol and biogas from industrial intermediates. Vinasse can be easily converted into biogas. However, after anaerobic process, hardly any biodegraded waste can be created. The task of scientists is to improve the technology of conversion of such waste to a form that can be safely used in the environment. Subsequent contracts related to re-

search and development services are currently under negotiation.

DEVELOPMENT WITH ADVANTAGES

Currently, the project is developed to provide another facility. It will include laboratories for: the authentication of products, biosensors and organic electronics, biotechnology, molecular simulation, personalised medicine and structural studies of nanomaterials.

The laboratories will be available to the companies from Lodz region. They will have the equipment which could not be afforded by the companies. In this way, Bio-NanoPark is to overcome the barriers faced by small and medium-sized technology companies.

The new building will also include a DLL supercomputer for chemical simulations. It will have the computing power of hundreds of thousands of ordinary laptops and will allow the generation of time-consuming calculations. It will allow each industry to simulate complex physicochemical, thermal and climatic phenomena. Thanks to this, the research of complex molecular systems and biological will be conducted.

Dr Dominik Rajski,

the owner of Analytical R&D



ince the beginning of the company's operation, we have been linked with the Lodz Business Incubator and TechnoPark. We were one of the first companies in 2009, which rented the office space there and eagerly awaited the opening of BioNano-Park since we needed laboratories for our activities. When taking decision to rent the premises, we knew that we could use the laboratory facilities.

Before BioNanoPark laboratory spaces were available to public, we converted a part of the office into the laboratory facility for our own use. We still use offices. However, in our business, the most important is research. Therefore, we often use BioNanoPark laboratories. We have never had or will have such research equipment. Fortunately, thanks to the BioNanoPark offer, we can propose to our customers a fully complementary offer.

We deal with R&D business sector and represent a typical research and development company. We provide services to the companies that do not have laboratory facilities or human capital. A separate group of our customers are also the companies that have laboratories and trained staff. However, they lack the time to conduct research or, because of a multitude of projects, they prefer to have them outsourced.

Analytical R&D specialises in the provision of laboratory services in the field of physicochemical materials and products, in the development of new analytical methods and their validation, in the organisations of trainings and creations of documentation, such as quality and other expertise, depending on the customers' needs Among them are the companies from the following industries: cosmetics, chemical, pharmaceutical and food industries.

The new building at TechnoPark will accommodate seven highly specialised laboratories, including the Structural Nanomaterial Research Laboratory and the Laboratory of Personalised Medicine. I do not know yet what it will look like in the end because its detailed design is still under construction. However, it is known – on the basis of functional and utilitarian design – that the shape of the building will be unusual because of the spherical shape of the Laboratory of Molecular Simulations. This laboratory will become the most important element of a unique scientific research base. It will be based on Real Complex Systems Analyzer (ARUZE), whose construction and design assumptions have been developed at the Lodz University of Technology. ARUZE allows to carry out research in real-time reactions in complex molecular and sub-molecular systems.

The new building with an area of over 4000 square metres with infrastructure is part of BioNanoPark project, financed mainly from the EU funds. Thanks to this, modern research and implementation centre was founded at TechnoPark. Last year, more EU funds were

acquired to extend the project. That resulted in a plan to build laboratories partly based on the concept of the European Centre for Bio- and Nanotechnology of the Lodz University of Technology and two additional laboratories proposed by the University of Lodz and the Medical University of Lodz. The new laboratories will complement currently functioning laboratories. They will represent the only existing comprehensive implementation centre for the industry in Poland.

Two largest shareholders of TechnoPark: the City of Lodz and Lodz Voivodeship, secured their own contribution to the financing of a new task (BioNanoPark+) within BioNanoPark project. The total cost of expansion of BioNanoPark is to reach nearly PLN 100 million. The European Union is expected to cover 85% of the cost of this expansion. It is supposed to end in 2016. It is the last call for the construction of R&D facilities, because, in subsequent years, the EU will distribute the money on research and development, i.e. for the use of the infrastructure, which has already been established.

Photo: Paweł Ławreszuk, Sebastian Wojczyk, W4E Centrum Energii



A VISIT TO THE CHEMIST'S IS USUALLY ASSOCIATED WITH CONSIDERABLE EXPENDITURES. PATIENTS ARE MORE CONSCIOUS THAT THEY CAN BUY CHEAPER MEDICINES, I.E. GENERICS. IS IT ALSO POSSIBLE TO BUY THEM EVEN IN THE CASE OF MEDICINES APPLIED IN THE COMPLICATED THERAPIES OR FIGHT WITH CANCER? THEY ARE GETTING MORE AND MORE POPULAR.

eneric medicines are the equivalent of expensive original chemical medicines. However, in the case of many treatments – even cancerous diseases – biopharmaceuticals are used. They are proteins produced by living cells. The equivalents of the reference medications are biosimilars that have the same effect as reference medicines, but have been produced with the use of technology developed independently by the manufacturer of biosimilar medicines.

Biopharmaceuticals are protected by patents of world medical corporations. However, after the expiry of the patent, medicines with the same interaction can also be produced by other companies, provided that they independently develop the process of their production and carry out their registration. This is not an easy task.

STRENGTH WITHIN UNITY

In 2007, four pharmaceutical companies: Celon Pharma from Łomianki, Polfarmex from Kutno, IBSS Biomed from Krakow and Genexo from Warsaw, as well as Bio-Centrum and Biotech Consulting enterprises established the Mabion company, whose mission is to research and

manufacture biosimilar medications. In the same year, works began on own biosimilar medicines.

Initially, the research was carried out in the laboratories leased from the Lodz Polish Academy of Sciences, but, already in 2010, the company moved to own Research and Development Centre. Currently, the construction of modern Science and Industrial Complex of Medical Biotechnology in the Lodz Special Economic Zone is in advanced stage.

Within a few years, Mabion has become capable of producing biotech medicines from the design stage, through the selection of manufacturing technology, to the production of finished medicament. In its laboratories in Lodz, the company conducts research and development works on a number of biotech medicines used in the treatment of cancer and metabolic diseases.

Mabion is currently the leading Polish biotechnology company. Its aim is to introduce into the market the latest generation of biotech medicines, based on recombinant monoclonal antibodies. This technology, developed independently at Mabion, is a high-tech at the highest world level. Manufacture of therapeutic monoclonal antibodies, representing today the greatest achievement of biotechnology, enables the



production of targeted medicines that act selectively on cancer cells, thus providing improved efficiency and reduced toxicity of the therapy.

For nearly four years Mabion has been listed on the Warsaw Stock Exchange.

METHOD FOR CANCER

Mabion is currently conducting advanced works aiming at registering a number of biosimilar medicines used in the treatment of cancer and autoimmune diseases. The works on own four medicines, forming therapeutic antibodies, are currently underway. The end of patent protection of corresponding biopharmaceuticals (i.e. reference medicines) falls in the years 2014–2019. A strategic goal of the company is the development, registration and marketing of biosimilars, shortly after the expiry of basic patents on reference medicines.

The company is currently conducting advanced research on a monoclonal antibody, whose working title is Mabion CD20. This preparation is used in the treatment of lymphomas and leukemias, as well as in the treatment of rheumatoid arthritis. The medicine has successfully passed the development phase of the manufacturing process, the characteristics of in vitro and preclinical research on animals. It is currently in the phase of clinical trials. In February 2014, Mabion presented to the Commission Data and Safety Monitoring Board (DSMB) – an independent committee including specialists in the field of rheumato-

logy, pharmacology and statistics – the clinical data obtained from approximately 40% of the total number of patients required to complete the research. The Commission – just like during the first August meeting – assessed the research process very positively. According to the opinion issued, clinical procedure does not require any modification. The opinion obtained from DSMB allows for the continuation of research in accordance with the company's planned protocol.

The second developed antibody is the medicine with a working name Mabion HER2, intended for breast cancer therapy. The medicine is in the stage of development of manufacturing process and analytical methods. In the autumn of 2013, the company obtained from the National Center for Research and Development a positive recommendation for funding the development works on this pharmaceutical product. The subsidy is to come from INNOMED programme, which aims to fund scientific research and works on solutions in the field of innovative medicine.

Mabion also develops antibodies: anti-VEGF and anti-EGFR. This first preparation will be used in the treatment of diseases of eyes, and anti-EGFR in gastrointestinal cancers (colorectal cancer and pancreatic cancer).

The company has also developed a unique, innovative technology of production of recombinant proteins in the form of insulin and insulin analogues, which are extremely important in medical and commercial terms.



NEW OPPORTUNITIES

Now, Mabion has a Research and Development Centre, including the facilities used for production of sterile forms of biotech medicines – recombinant proteins, as well as laboratories: molecular biology and genetic engineering, analytical, biochemical and cell cultures. The company is building Scientific-Industrial Complex of Medical Biotechnology with a usable area of about 6.5 thousand square metres in the Lodz Special Economic Zone. The value of investments and the equipment will amount to several million PLN. Commissioning of the complex is planned for 2014.

The plant that is under construction is to carry out the production of anti-cancer medicines, currently being developed, and other biosimilars. For the first time in the world, innovative technologies of biotech medicines will be applied on a large scale: orbital shaking – giving the possibility of cost-effective development of biofermentation processes, and disposables – enabling flexible use of production potential.

The company intends to register its pharmaceuticals on all global markets where reference medicines to developed products are sold. The markets will be located in: the U.S. and Europe and other countries of the world, where the registration is less strictly regulated. The company plans to make registration of medicines on its own throughout the European Union, where it will conduct

clinical trials in collaboration with several dozens of centres. On the other hand, registration of medicines in other markets will be held by local partners, which is justified by the presence of diverse and market-specific registration procedures for biotech medicines. Since 2012, the company has consistently gained new business partners. As a result, further agreements and letters of intent are signed. So far, the contracts have been concluded for the countries of South America and Central America, North Africa, Turkey, Ukraine, Armenia, Azerbaijan, Belarus, Georgia, Kazakhstan, Kyrgyzstan, Moldova, Tajikistan, Turkmenistan and Uzbekistan. Mabion also has letters of intent for the Middle East and the Balkan countries. What is more, the company positively completed a Scientific Advice procedure in the European Medicines Agency (EMA) and the American Food and Drug Administration (FDA) for the qualitative and clinical development of Mabion CD20 medicine. This confirmed the possibility to start preparing regulatory and marketing plans in the U.S. market.

Mabion is the recipient of numerous innovation funding programmes within the EU. As a result of applications submitted so far, the company has acquired funding for projects with a total value of nearly PLN 64 million. The market of reference medicines including up to four preparations developed by the company is worth a total of about USD 20 billion. Ultimately, the company plans to offer a broad portfolio of biotech medicines.



roteon Pharmaceuticals is the Polish innovative technological company operating in the biotechnology sector. The company was founded in 2005, and its primary purpose was to commercialise a new, unique technology of evaluation and cytotoxicity of chemical substances. Then, the company expanded its field of activity and began developing biotechnology products based on the use of bacteriophages.

The founder of Proteon Pharmaceuticals is Professor Jarosław Dastych, who has extensive experience in conducting research in the field of biotechnology and implementing its results into practice. The scientific team of the company consists of an interdisciplinary group of experts who are characterised by extensive competences. They include the ability to isolate and culture bacteria as well as bacteriophages, the use of sophisticated bioinformatics tools for the analysis of genetic information and bio-fermentation process optimization as well as purification carried out on an industrial scale.

NEW CHALLENGES

In 2009, Proteon Pharmaceuticals began to focus on the development of a new generation of antibacterial agents by using the activities of bacteriophages. – Currently, the problem with the emergence of antibiotic resistance of bacteria leads to increasing difficulties in combating bacterial diseases. It is becoming a pressing problem and one of the most important issues in modern medicine and veterinary – notes Jarosław Dastych. Fortunately, bacteriophages, i.e. viruses which, with the support

of their DNA, infect pathogenic bacteria cells and cause their decay, help to fight the bacteria which no longer respond to antibiotics.

Race between pathogen - a virus and host, i.e. bacterium, has lasted for thousands of years. The idea for the use of bacteriophages appeared a hundred years ago and was abandoned after the discovery of antibiotics. Recently, science and medicine have returned to this method. Soon bacteriophages can find their place in modern medicine, veterinary medicine and plant protection - if there are bacteria harmful to us. The advantage of bacteriophages over other agents is that they act very selectively by destroying only certain species of bacteria and not harming beneficial intestinal flora. This is essential for our living. The use of bacteriophages by Proteon Pharmaceuticals as innovative formulations is a very promising solution to the global harassing problem, e.g. poultry industry. This applies to the infection with Salmonella bacteria. The bacteria not only affect the health and productivity of hens but also the people who consume contaminated poultry. Proteon company, through its research, has developed and patented an original technology of production of BAFASAL bacteriophage preparation. It is currently under advanced commercial registration process in the European Union. This registration is essential for its market sales.

ON THE PATH OF DEVELOPMENT

The company carries out further research projects to develop innovative products dedicated to veterinary medi-



cine and agriculture. Currently, Proteon leads a research project entitled 'The new veterinary medicine for fish'. It is co-financed by the European Regional Development Fund under the Innovative Economy programme.

The aim of the project is to create a technology bacteriophage preparation including a mixture of several bacteriophages sealed in biodegradable microcapsules, which can be mixed with feed, to obtain medicinal food for farmed fish. – Carefully selected and optimised composition of bacteriophages ensures that the formulation used in the form of medicated feed will destroy, in a specific way, pathogenic strains of bacteria that cause disease with farmed fish, while not affecting the natural bacterial flora of these animals – tries to convince the founder of the company.

The plans of the company are to create a whole line of bacteriophage preparations dedicated to veterinary medicine, agriculture and medicine.

LOOKING AHEAD

In 2013, Proteon Pharmaceuticals moved research work to a new laboratory. Its area is more than 150 square metres, half of which is occupied by the 2nd class laboratory of microbiological safety. The company has the latest laboratory equipment, which allows to conduct intensive research at the highest level on the basis of the highest standards. The company is also in the final stage of the implementation of Good Laboratory Practice, related to the procedure of quantitative determination of bacteriophages in a suspension by a two-layer agar. By the end

of July 2014, the company is also planning to implement the Quality Management System according to PN-EN ISO 9001:2009 for conducting research and development works in the field of biotechnology.

SIGNIFICANT BRAND

In less than ten years, Proteon Pharmaceuticals has become the brand recognised in the biotechnology industry in Poland and Europe. This is due to the company's founder – Professor Jarosław Dastych and groups of involved enthusiasts, whom the Professor managed to persuade to cooperate.

Almost from the outset of its operation, the company is noticed and appreciated in the biotechnology industry. During BioForum 2010, the company was recognized as one of the three most promising companies in Central and Eastern Europe in the competition for Bioinnovations. During this event, the enterprises that could boast of the biggest innovation in the bio industry were awarded.

In 2012, Proteon Pharmaceuticals was named the laureate of special prize granted by the President of Lodz in the 'Lodz Proposes – Innovative and Creative' competition. The aim of the competition is to select the most innovative companies and support the development of small and medium-sized businesses, including those operating in the creative industries.

Recently, the company has been a laureate of Symbol 2013 programme, run by the editors of 'Dziennik Gazeta Prawna'. The company was awarded the EuroSymbol Innowacji title.



BY JAROSŁAW ZARADKIEWICZ

IT specialist needed

IN LODZ, THERE IS A PROFESSION WHICH IS ASSOCIATED WITH A NEGATIVE UNEMPLOYMENT. HOW IS THIS POSSIBLE? THE ANSWER IS SIMPLE – THE MARKET IS ABLE TO RECRUIT ANY NUMBER OF THESE PROFESSIONALS. WHO? SOFTWARE DESIGNERS! THEY ARE THE MOST SOUGHT-AFTER EMPLOYEES. AT THE LODZ UNIVERSITY OF TECHNOLOGY, EVERY YEAR, THE STUDIES EDUCATING SPECIALISTS ARE GROWING IN POPULARITY.



he companies from new technologies sector encourage young people from Lodz and other places to start working in this city. Higher education institutions adapt training profiles to meet the needs of the labour market. There, every third employee is sought by the companies concentrated in a cluster of information and telecommunications of ICT Central Poland.

For years in Lodz, the companies from IT industry have been established and developed. There are so many enterprises established that, in the end, they represent a serious force. Only in Lodz, participants of the cluster employ 7,5 thousand employees. Some were created on the basis of personal experience and passion of their creators; other ones are the subsidiaries of global brands. At last the city, which was not attributed the potential growth in IT has become a power in the IT industry and outsourcing. How did this happen?

THEY DISCOVERED THE POTENTIAL OF THE CITY

In Lodz, there are academic centres which educate students in computer science well, thereby providing qualified staff. In addition, the city is open to cooperation with em-

ployers, supporting entrepreneurs on many levels – explains Sylwia Sałek, HR Specialist at Transition Technologies.

Vibrant development of the IT sector in Lodz also constitutes a synergy of activities of many companies, cities and academic world. – Many technology companies have moved their headquarters and offices to Lodz. This caused the establishment of some sort of the centre. Lodz offers very good conditions, also through the creation of favourable business areas – emphasises Krzysztof Miksa, the head of the Lodz branch of TomTom, a global manufacturer of GPS software. – The location of Lodz TomTom office is primarily associated with the acquisition by TomTom of TeleAtlas Belgian company, which also operated in Lodz. Our branch mainly deals with the development of software for PND devices as well as creation and update of the previously mentioned maps – explains Miksa.

In addition to the companies that have opened their branches in Lodz, Lodz IT market is also developed by domestic companies, whose owners come from that region. Within 20 years, they have grown to a considerable size and become a recognisable brand in Poland and the world.

ICT Central Poland Cluster

July 2012 – on the initiative of the Lodz University of Technology, ICT Central Poland Cluster was established. This undertaking is a collaboration platform for cluster members, interested in the development of technology as well as in the information and communication techniques. The association includes 22 entities, including the companies from the information technology and telecommunications industries, business environment units and the Lodz University of Technology, which serves as the Coordinator of the cluster with a technological nature.

The main objectives of the initiative include, among others, integration of the IT, telecommunication and electronic industries, support for entrepreneurship and the development of labour market in the area of ICT, creation of the requirements for the implementation of new information and computer science technology, including the commercialisation of research results as well as the development and training of staff.

The tasks of the cluster are the execution of research, development and implementation projects in the area of ICT and cooperation with central and local government in the scope of development of favourable conditions for business and knowledge resources, in particular for ICT.

The participants of the cluster are currently the Lodz University of Technology, Accenture, AMG.net, ZETO Computer Centre, Comarch, Cybercom Poland, Ericpol, Fujitsu Technology Solutions, Foundation of the Lodz University of Technology, Infosys BPO Poland, Intergraph Corporation, LSI Software, Lodz Regional Development Agency, Lodz Special Economic Zone, Lodz Regional Park of Science-Technology, Makolab, Pixel Technology, Rule Financial, Symphony Teleca, Technitel Polska, TomTom Polska, Transition Technologies.

It is not insignificant to note that Lodz has a lot of interesting office spaces and relatively inexpensive workforce.

– Lodz was the only major city in Poland with lower salaries, in addition to this, it offered a sufficiently large number of graduates of technical universities. This is a decisive factor why the IT sector should be supported financially in the city – this is how the development of this sector is explained by Marek Brylski, the Product Director at Intergraph.

Also, Prof. Piotr Szczepaniak, the Vice-Rector of the Lodz University of Technology, the Chairman of the Cluster of



ICT Central Poland, stresses the importance of a friendly business climate.

– Lodz is a booming academic centre, where currently there are more than 90 000 students. This is partly due to the availability of a highly qualified staff, the possibility of close cooperation with Lodz higher education institutions, local and voivodeship authorities as well as a relatively low cost of doing business – such as the cost of remunerations, wide availability of modern office spaces – ICT/ITO companies have the possibility of dynamic development. A significant increase in investment companies from the ICT sector recorded in recent years in Lodz has triggered subsequent investments in this area – explains Prof. Szczepaniak.

COOPERATION CLUSTER

ICT Central Poland Cluster is the unit that supports the development of the IT market in Lodz. It was established in July 2012 at the initiative of the Lodz University of Technology, which coordinates the project. The cluster includes the University, its foundation and 19 business entities in the IT and telecommunications sectors operating in the city. The cluster is a collaboration platform for its participants, interested in the development of technology, information and communication techniques. The main objectives of this initiative include, among others, integration of information technology, telecommunications and electronics environments, support of entrepreneurship and development of the labour market in the ICT area, creation of conditions for the implementation of new information technology, as well as the development and training of staff for the members of the cluster. The companies recognise numerous benefits arising from participation in the initiative.

 AMG.net actively participates in the activities of the ICT Cluster because of a unique opportunity to cooperate



with all major IT companies in the area, with the academic world and local government institutions. Jointly coordinated actions in this group are primarily aimed at adapting the curricula of state higher education institutions to the current expectations of employers. Furthermore, the cluster's activities are designed to promote the Lodz region on a local and national level as a very attractive place to work in the ICT sector – Miron Niewiadomski, PR manager at AMG.net, explains.

Marek Gajowniczek of Ericpol, the Chairman of the Task Force for Education, emphasizes that the companies positively view his operations.

– The major benefit of cooperation in the cluster is better adaptation of the curricula of the Lodz University of Technology to market realities. Thanks to this, the companies will spend less time on further training and introduction of newly employed graduates to real projects – says Marek Gajowniczek, the Programme Director at Ericpol.

Representatives of all the companies of the cluster higher appreciate the possibility of cooperation with other entities in the area of Lodz IT. – The companies can exchange ideas and own experiences. The organisation associates the majority of Lodz employers in the IT industry, thus making it a treasury of knowledge. All this is conducive to further development of the IT sector and the company itself. The cluster also cooperates with Lodz academic

circles. This will certainly help to attract new talents in the future – this is how Krzysztof Miksa of TomTom appreciates the role of the cluster.

The cluster has taken root in Lodz reality and has achieved the first major successes. – Its operations have a real impact on IT existence in Lodz. A prime example is the inclusion of IT to the strategic sectors of economy in our region, thanks to the efforts of the ICT cluster – notes Witold Rogowski, the Director of Accenture Delivery Center Polska.

EDUCATED SPECIALISTS

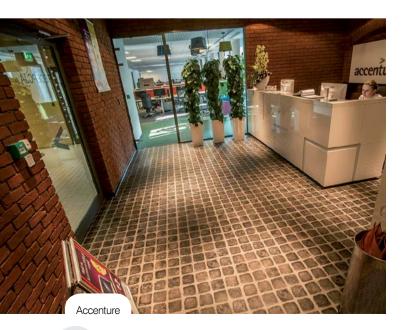
One of the main objectives of the cluster was the profiling of studies in such a way that the graduates of technical universities could be best prepared to start work. There are the first results available.

– Lodz state higher education institutions increasingly cooperate with businesses on the adaptation of curricula to the needs of employers. It is a very good way to facilitate not only the recruitment of graduates to companies, but also to familiarise them, as early as possible, with the requirements of the market and to confront with their own ideas – notes Miron Niewiadomski of AMG.net.

Marek Brylski appreciates the changing attitudes of higher education institutions. He also notes that the basis for the company's success is its employees. – Higher education institutions try to adapt the curriculum to the



needs of companies. The situation is gradually improving in this regard. Today, in addition to the curricula, the attitude of young people is also important. They should be encouraged to seek or take responsibility for what they are doing, as well as to use best practices available in companies. Behind every present Lodz company, there are people who support the development of the companies – notes Brylski.



The adjustment of educational offer to the needs of the market is emphasised by the Lodz University of Technology.

– Close cooperation with enterprises allows for the development of new forms and methods of training and verification of knowledge, skills and competencies. As part of the team work, among others, the review of the curricula of studies in IT science was carried out to meet the needs of employers. Also, with the participation of enterprises belonging to the cluster, a new block of elective subjects 'Testing and software quality assurance' was recommended. The employees of the companies are also involved in observations. This will allow them to know the methods of teaching and verification of skills as well as to propose modifications – explains Prof. Piotr Szczepaniak.

EXPERTS NEEDED

The recruitment process in IT companies Lodz has lasted constantly. Almost all the companies have a tab on their website dedicated to employment. The companies also have their own training programmes for interns and graduates. Those who are interested in such programmes benefit from the Academic Job Fair, organised by the Lodz University of Technology. The companies also recruit through employment agencies and Internet portals.

An interesting solution was applied by Accenture

– a global company dealing with consulting, advanced

Photo: Kuba Ceran/AMG.net, Ericpol, Paweł Ławreszuk, Andrzej Stawski/Accenture, Transition Technologies

Prof. Ph.D. eng. Piotr Szczepaniak

Vice-Rector for the Development at the Lodz University of Technology, Chairman of the Council of the ICT Central Poland Cluster

he benefits of the existence of the cluster are gained by students, entrepreneurs and scientists. For students, classes, workshops and seminars with the employees of the companies are organised. It is easier for them to access listings of internships, and the training offer adapted to the needs of the labour market is continuously expanded. Through mutual cooperation, entrepreneurs strengthen business contacts, new opportunities for cooperation in the field of research

and development are created, and the offer of training of students adapted to the needs and expectations of companies in the ICT industry is developed. On the other hand, scientists carry out joint scientific and research projects, orient their research on the practical needs of enterprises and, as part of the implementation of industrial internships, they can acquire skills and awareness of the benefits arising from cooperation between the R&D sector and commercialisation of knowledge.

technologies and outsourcing. – A very valuable source of finding employees for our company is a 'Recommendation Programme'. The employees recommend their friends to work at Accenture, and in return gain attractive monetary gratification, as well as their trusted colleagues for cooperation – says Witold Rogowski of Accenture.

Lodz market is getting shallower, so the industry is trying to look for people willing to work outside the capital of the region. – We have undertaken attempts to search for candidates from other cities – we participated in the fairs in Bydgoszcz, Rzeszow, Kielce and Czestochowa. Unfortunately, although we aroused interest in Czestochowa, the candidates failed our recruitment process. In other cities, it is difficult to encourage candidates to move to Lodz. Therefore, we take joint efforts within the cluster to show Lodz – the city good for life and a true promised land for ICT specialists – says Marek Gajowniczek of Ericpol.

Companies lure and promise, but first of all they focus on business. – At AMG.net, the most important is each individual. Our motto 'Be yourself, develop your talent' fully reflects the philosophy of our organisation – we provide the opportunity to work in one of the best IT teams in Poland, while supporting the development of own non-professional passions. We combine work with fun, but first of all, we focus on professional services and fulfill-

ment of commitments to our customers. We try to invite to us the people from any city in the country – adds Miron Niewiadomski.

Representatives of the IT industry stress the fact that that not only skills matter to them, but also passion and commitment. Despite the fact that the IT industry is mainly associated with technology, it would not exist and would not be developing without people.

– Our team is made up of modern technology enthusiasts who eagerly want to gain knowledge and new skills. We are looking for open people who are not afraid to take the challenges and want to develop their competencies. An important aspect is also knowledge of foreign languages, especially English. First of all, we employ programmers. They do need not be graduates of computer science. What counts is passion, analytical skills and knowledge gained from their own activities such as training – explains Sylwia Sałek of Transition Technologies.

Companies recruit mainly graduates with technical skills. However, humanists are able to find a job in a company with a purely technical profile.

– We employ experts knowledgeable in the areas in which we currently have recruitment needs. The field of studies is not that relevant for us. Skills, potential, passion and willingness to develop competencies are most desirable – adds Miron Niewiadomski of AMG.net.



BY JAROSŁAW ZARADKIEWICZ

We are eternal optimists

– AFTER COMPLETING MY STUDIES IN ENGLAND, I HAD A DILEMMA: STAY IN BRITAIN AND PURSUE MY CAREER, FOR EXAMPLE, IN A CORPORATION IN LONDON OR RETURN TO POLAND AND REALISE MY CAREER OBJECTIVES – ADMITS TOMASZ CICHOWICZ, THE FOUNDER OF WEBWERX. HE CHOSE POLAND, MORE PARTICULARLY LODZ, WHERE HE DEVELOPED HIS BUSINESS THANKS TO 'YOUTH IN LODZ' COMPETITION. HE HAD A GOOD IDEA FOR HIS BUSINESS. he owner of Webwerx studied simultaneously at Lodz University of Technology and Coventry University in England. He worked from the second year of his studies. – My whole education was focused on computer science. I do what I like and love – admits Cichowicz.

Half a year after graduation in England, he opened his business in Lodz. The dilemma that tormented him a few months masz Cichowicz.

Half a year after graduation in England, he opened his business in Lodz. The dilemma that tormented him a few months earlier ended in favour of his home country. – I deeply appreciate Poland; my friends are here, I feel at home here and do not have to prove anything to anyone. Here is also the potential for development, because a lot of things need to be improved – reveals the company's director and eternal optimist. He describes the city where he lives with optimism. – Lodz changes year by year, of course, for the better. The city will continue to grow due to its location, infrastructure and university facilities. Lodz is turning the corner. There is still a lot to do, but it could be a completely different city in 10 years – says Cichowicz.

BUSINESS THAT EMERGED FROM COMPETITION

Before the company was founded, Tomasz Cichowicz had a few customers, for whom he rendered services based on civil law contracts.

– When leaving England, I shared my idea for business with my employer. To my surprise, he suggested that he would like to participate in my business venture – says the founder of the company. That is how the offices were established in the UK and Poland. The English branch finds customers and the service provider is a team of employees in Lodz.

After returning to Poland, Cichowicz took part in 'Youth in Lodz competition – I have an idea for business'. He described the profile of the company and wrote a business plan. His idea led him to the final. This allowed him to start his business. In Lodz, another company was established: Webwerx – ITO sector company, i.e. IT Outsourcing.

COMPETITIVE MARKET

– I was focused on self-realisation. I felt that an ordinary job limited me. I thought I could do better, faster, more productively and efficiently as well as maintain a high level of satisfaction of employees and customers – says Tomasz Cichowicz. He adds that the idea for the company is not new. However, the success of the undertaking lies precisely in his approach to work. In addition, the outsourcing services in Poland have – on the European market – a significant advantage over the competition from Asia. – We are close, there are no cultural differences and we are in the same time zone – explains the Director of Webwerx.

By creating a company with branches in Poland and the UK, we have managed to combine the best options from both countries. Poland's advantage is great IT facilities – an absolute elite in the IT industry. The company recruits its employ-

ees, among others, through praktyki.lodz.pl web portal as well as goldenline.pl and linkedin.com, dedicated websites for professionals. Webwerx also cooperates with universities in Lodz. The company initiates, conducts and sponsors diploma theses. – We want students to do useful things as well as gain commercial and practical experience. This cooperation is mutually beneficial, and we are planning to extend its scope – says Tomasz Cichowicz.

GROUNDBREAKING INNOVATIONS

Webwerx offers many standard services in the field of information technology, consulting or post-implementation support. Cooperation based on the estimation of task in advance, availability of certain professionals or working settled hourly. In the company, dedicated software is mainly produced. It mostly includes web applications, in which the company specializes. The customers of Webwerx are service and manufacturing companies of SMEs sector, as well as large companies.

However, the company does not rest on its laurels. It also focuses on the search for innovative solutions. One of the innovations is e-commerce platform created to meet the needs of the industry related to 3D printing. This allows to value and visualise models as well as to place and process orders promptly. The customer enters the website, uploads files with the project and immediately receives visualisation and quote. Then, the customer parametrises, composes and pays (e.g. Pay-Pal) for the order. Shop customer service realises the order and the customer receives a printed object in a few days. – We have noticed that there is a very big problem associated with the valuation of 3D printing, which limits the abilities of the service provider, who has had to value each request manually. We have realised that this process can be improved and, at the same time, an online platform can be created. Thanks to this, the service will be more accessible - recollects Tomasz Cichowicz. That is how e-commerce platform came into being in response to the 3D printing need. It was recognised in the InSight2030 into Silicon Valley TechMatch Poland competition in December 2013, organised by the Investors from Silicon Valley and the Ministry of Economy.

Also, there is a new three-dimensional RGB LED display with the possibility to display any animation. It is a modern form of advertising and presentation. – In the jungle of various forms of promotion, it is necessary to stand out in order to be noticed. Our device provides such a solution. The project is unique in the world. We attach proprietary software to the display – says the owner of Webwerx.

The latest software created in the company includes an innovative tool for business. It allows to identify visitors to websites or other Internet applications by displaying their contact details along with subpages, with an indication of date and time of visits. It is a tool for anyone who wants to efficiently manage the sales process.



THE BIGGEST INTERNATIONAL FASHION EVENT IN POLAND TAKES
PLACE IN LODZ TWICE A YEAR. IN MAY 2014, THE TENTH
FASHIONPHILOSOPHY FASHION WEEK POLAND EVENT WILL BE HELD.
ON THIS OCCASION, DESIGNERS, JOURNALISTS AND BUSINESS WORLD
WILL MEET TOGETHER.

he event, lasting from 6 to 10th May, will be organised in a modern EXPO exhibition centre in Lodz for the first time. The guests will be able to see the premiere collections created by the most talented Polish designers and international fashion houses for the autumn–winter season of 2014/2015.

The event highlights fashion traditions of the city – a thriving centre of the development of creative industries. Thanks to fashion, Lodz also designs its future. The city is a major academic centre, where arts colleges and universities play an important role. FashionPhilosophy Fashion Week Poland opens a new space for the development of fashion business as the leading branch of creative industries. The event is a place setting new trends. Constantly strengthens Polish fashion market by making it attractive to the world of business.

One of the stars of the spring 10th edition of FashionPhilosophy Fashion Week Poland will be Agatha Ruiz de la Prada. She is the most famous Spanish fashion designer. For more than 30 years, her artistic creations have always been present on the largest and most important stages in the world of fashion, and she enjoys the status of pop culture icon. The collections bearing the sign of de la Prada attract attention with their distinctive style and arouse strong emotions.

HUMBLE BEGINNINGS

In the world, such events are held for more than 70 years. Five years ago, Poland – despite its excellent history and huge potential – was a white spot on the map of fashion events in the world. How did the idea for Lodz Fashion Week come about? – Multigenerational tradition of the city has pushed



FashionPhilosophy Fashion Week Poland

6-10 May 2014, EXPO-Lodz, al. Politechniki 4

Strategic Partner: City of Lodz

Organiser: Moda Forte Partner: EXPO-Lodz Patron: Samsung

Sponsors: Carlo Rossi, Colgate MaxWhite One

us in this direction: in the nineteenth century, Lodz was associated with weaving, in the twentieth century, with textile. In the twenty-first century, Lodz is a creative city. Fashion industry represents the second professional group in Lodz. It employs more than 100 thousand inhabitants – explains Jacek Kłak, the initiator and main organiser of the event.

The first edition of the event took place in May 2009. It presented the collection of autumn—winter season of 2009/2010. It was attended by more than 3000 visitors, and more than 200 journalists were accredited. Despite favourable acceptance and climate, the beginnings were not easy. Jacek Kłak sold the apartment to balance the costs of organisation of the event. He also subsidised subsequent editions. However, interest in the event and its prestige grew. The undertaking became profitable only after the event has achieved world-class rank thanks to consistent work. Subsequent editions are held every six months. They present the fashion trends for the coming season. The ninth edition was attended by more than 15 000 visitors and more than 1000 accredited journalists.

– FashionPhilosophy Fashion Week Poland has grown to the status of the event representing the platform of communication in the scope of fashion, media



and business. Lodz has become a regular meeting place for clothing companies, schools, fashion designers, as well as chambers and foundations associated with the industry – says Jacek Kłak with happiness.

GLOBAL VENTURE

Currently, Polish Fashion Week is a three-day event with a tight busy schedule. It takes place on several thousands of square meters. It involves dozens of fashion designers, hundreds of exhibitors and thousands of visitors. The latest collections will be presented by more than 50 models selected in many castings from over 200 applications.

The beating heart of FashionPhilosophy Fashion Week Poland is, as always, Designer Avenue shows,

organised as part of a three-day cycle, during which the best Polish fashion designers and special guests from abroad present their collections. The shows are of the premiere character, and the collections have not yet been presented in Poland. During this year's edition, as part of the project, the collections will be presented by the following artists: Odio and Jakub Pieczarkowski, Kędziorek, Malgrau, Sowik Matyga and Kubatek. Also, Pjotr Górski, the winner of 'Designers get ready' programme, will present his collections.

During the 10th edition, the shows will be complemented by 'Studio' for the first time. This new cycle allows the participants to present themselves in a professional environment to the designers whose collections have been

Photo: Łukasz Szęlag/Moda Forte

Irmina Kubiak, the creator of Fashion-Philosophy Fashion Week Poland project



Irom the outset, our intention has been to stimulate the fashion market, as, by working in this market for many years, we know how many talented people are in this industry. Most of them did not have a chance to promote themselves and enter the closed world of celebrities, or otherwise they could be a part of this world much later if they tried hard. FFWP proves that fashion is a product that could bring measurable benefits. A growing number of fashion designers treat this profession as a source of income, not a hobby. More and more created collections are ready for sale and are of really good standard. Certainly, we can say that FFWP has positively stimulated the entire fashion industry into action - from fashion designers, manufacturers (including the companies offering sewing services) buyers/sellers to the final recipients. The customers' perceptions and needs are changing with respect to fashion. At present, many people who want to look

stylish every day change foreign high-class brands in favour of the Polish fashion designers.

FFWP is different from other FWs in that is has a wide range of activities that support the industries of fashion. FFWP does not only organise the shows of the latest trends. It is also a platform of joint supporting activities. Fashion designers, the media, manufacturers and buyers meet are able to meet in one place. The synergy of joint actions gives far greater possibilities.

Lodz FFWP is based on our knowledge and experience in the organisation and production of hundreds of domestic and foreign gala fashion shows in most European capitals and smaller cities. Our event is based on knowledge and extensive experience. We work with many FWs in Europe. We send our designers to such events, and we invite others to us. We know that our project is considered abroad as serious and well-organised, on the basis of the opinions of guests and our designers – ambassadors.

highly rated by the Board of Polish Fashion Week, but could not be qualified for Designer Avenue shows. Also, the premiere collections are shown there. Among them, the collections of: Magda Floryszczyk, Jarosław Ewert, Ola Bajer, Monika Gromadzińska and Mixer Fashion.

If the heart of FashionPhilosophy Fashion Week Poland is Designer Avenue shows, then the expression of the alternative side of its spirit is OFF Out of Schedule avant-garde fashion catwalk, providing a platform for penetration of different fields of art. As part of the shows, various collections, installations and performances will be presented by Kas Kryst, Momi-Ko, Szpila, Katarzyna Górecka, Paulina Ptashnik, Zwyrd, Jakub Pieczarkowski, Ima Mad, Blot, Anna Kołodziejska and Romana.

Permanent exhibition area is the Showroom. There, designers and professional brands present clothing, jewellery and accessories collections. This year, this part of the event will be organised in the spacious EXPO-Lodz interiors for the first time. This will create new opportunities for exhibitors to establish business relationships and to effectively promote their collections on a large scale.

'Let Them Know' series of trainings and lectures, intended for designers, manufacturers, the owners of clothing companies or marketers, deserve particular attention. During this event, the participants will be prepared for entering into relations with the business world and building a brand in the fashion market.

OFF Piotrkowska trends

BY ANNA KRYSZCZUK



AT PIOTRKOWSKA STREET, OUR ATTENTION IS DRAWN TO A GIANT BLUE BALLOON WITH THE 'LODZ CREATES' LOGO. NEXT TO IT, IN OUTDOOR CAFES, YOUNG AND OLD TAKE THEIR SEATS. THEY ARE IN NO HURRY BECAUSE OF THE SPRING WEATHER. THE AREA AT PIOTRKOWSKA 138/140 HAS A LONG HISTORY: IT HOUSED A COTTON FACTORY OF FRANCIS RAMISCH, A TRENDY MUSIC CLUB AND ASIAN FOOD STANDS. NOW OFF PIOTRKOWSKA ERA HAS BEGUN.

ho happened to be there for the first time, always happily returns. The inhabitants of Lodz and other people are not only attracted by the boutiques with collections of fashion designers and jewellery as well as by the stores specialising in the sale of wine and cheese. They are also tempted by many cafés and restaurants. On the floors, the companies have their headquarters and they are related to the creative industry. Both visitors and entrepreneurs together define OFF Piotrkowska as a place having specific climate.

– This area, following the example of bohemia, is vibrant with life only in a proper pace. People and their imagination are the only limitation for cultural activities in this place – Agata Stolarska and Barbara Reinhold, the owners of TooNE Beautiful Craftwork Storehouse, say happily.

THE ORIGINS OF CREATION...

All the companies in the building of the old factory at Piotrkowska have many different stories. Barbara Reinhold and her friend, Agata Stolarska, after their long-time travels, met for a coffee for a long conversation. – We sat down and began making plans: 'I have nothing, you have nothing. This is what we have, just enough to establish...'.' The reference to the 'Promised Land' by Reymont occurred instantly – says Basia Re-

inhold. – We decided to create a place where we could collect unique and beautiful things. A bit like modern 'factory owners', we joined our tastes, interests, sense of aesthetics and inspiration – adds the co-founder of TooNE. The choice of Lodz, as a place of business, was evident. For years, they both were tied with the city: there they lived and studied. – The restaurant we decided to rent at OFF Piotrkowska is situated today in the most fashionable place on the cultural map of Lodz – they explain.

That place was found by another person, Domini-ka Karczewska, the owner of Indygo Artistic Ceramics Studio, who once was looking for independent business. – I wanted to create something of my own, which could combine my education and experience – recalls a graduate of the Academy of Fine Arts in Lodz. She has always been interested in pottery. So one day she decided that she would create such things. Earlier, she made reconnaissance at various ceramic workshops in Poland, where she learned her trade from scratch and so her business started.

Inspirations from her student times were also drawn by Dorota Szczęśniak, the owner of Indygo Fine Arts Studio. – As a student I conducted art workshops for children and adolescents. It gave me pleasure and satisfaction – she answers. In her opinion, current educational system treats all manual classes with neglect,



TooNE Beautiful Craftwork Storehouse

Barbara Reinhold and Agata Stolarska have decided to create a place where they will sell unique and beautiful things, including those that they like. In the boutique, customers can get clothes and accessories, as well as ceramics and crafts.



Indygo Fine Arts Studio

Dorota Szczęśniak owns her own business thanks to her inspirations from student days. As a student, she conducted art workshops for children and adolescents. This type of activity brought her pleasure and satisfaction. Therefore, she saw in it the meaning and purpose of development of her own business.



hence the idea of opening a place where such skills could be developed. Initially, she focused exclusively on practical training. However, the market posed a new challenge. – I was visited by a group of photography enthusiasts, who wanted to develop their knowledge of composition. Therefore, I began to conduct theoretical classes – says Dorota Szczęśniak.

IN THE FIRST PLACE - DIVERSITY...

This place opens its doors to a wide audience, which wants to spend free time in an interesting and unusual way. – Everyone can attend the classes by regardless of age and previous experience. My offer also includes workshops for schools and businesses. I am involved in an activation project for the elderly called 'Seniors in Action', organised as part of OFF Piotrkowska. I also conducted a workshop during the 'Lodz Design' festival. I also cooperate with the Department of Design at the Lodz University of Technology – students have the opportunity to take practice in my studio – explains Dominika Karczewska.

OFF Piotrkowska, as a hotbed of creative industry, realizes the idea of combination of art with business as well as the integration and promotion of artists. The functionality of avant-garde art, which finds its amateurs and customers, is appreciated by Aleksandra Frankowska-Plewka, the owner of OKO studio. – We are a place of work for local artists. Their works are found by numerous new customers.

Fashion and design, mainly offered by Beautiful Craftwork Storehouse, are also the major sectors of creative industry. – We try to get to the top designers and make it easy for them to reach the customer. Our shelves and hangers occupy niche brand products. Here, it is hard to have a wide distribution or the authors of works even deliberately avoid any such distributions – tell Barbara Reinhold and Agata Stolarska.

TooNE is not just a shop. The customers can sit on a comfortable couch, drink coffee or tea, listen to stories about the artists whom the owners know personally, and some of them are their friends. – We are very pleased to offer our customers the things that we know where and by whom they were originated. Our offer is for anyone who attaches great importance to aesthetics. There is something for everyone seeking specific solutions in fashion and design, unique items, created in one or more counterparts and, importantly, made in Poland – they add.

Indygo is a place where everyone can find a way to express their own personality and expression. – We treat each person individually, and the participants of our courses feel free with us. Therefore, they fully develop themselves – Dorota Szczęśniak says.

OKO studio

Thanks to her own workshop, Aleksandra Frankowska--Plewka could develop her practice and take care of the artistic education on a full time basis. She provides her customers with as many forms of training in arts as possible.



Indygo Ceramics Studio

Dominika Karczewska started her own independent business. Now she designs, creates and sells decorative ceramics. She also conducts workshops for individuals, schools, companies and institutions.



The range of products and services offered by artistic creators from OFF Piotrkowska is very wide. The variety of forms of expression and artistic activity as well as the profiles of participants influence the attractiveness of conducted projects. The offer of Indygo Fine Arts Studio includes lectures, workshops and training courses for all people including drawing, painting, hand-made crafts and fine arts. In addition, the studio leads personal courses in composition, analyses of the form and content of the image as well as the foundations of art history.

STEP INTO THE FUTURE...

Passion and development accompany offbeat artists from Piotrkowska since the beginning of their careers, but their plans go far ahead. – First of all, I want to become a recognizable brand in our city. I already have a large group of permanent participants of the workshops and invite more people. I still learn new techniques of working with clay and I transfer them further. I think people will be more interested in ceramics, which will translate into sales of my products – says Dominika Karczewska.

Creative companies follow towards new inspirations, tasks as well as artistic and educational objectives. OKO studio focuses on popularising art education and its importance for ordinary people, who are unfamiliar with art.

– The entire team of OKO studio feels the spirit of our mission. We put a lot of effort to ensure that our courses could bring good things in the life of adults and children. We would like to introduce theoretical art and philosophy. Last year, we began residency programme with the visit of the German artist Line Krom. We want to develop this programme so that our students have direct contact with art, not only from our region. Popularisation of artistic education is an end in itself for us – Aleksandra Frankowska-Plewka shares her vision of development.

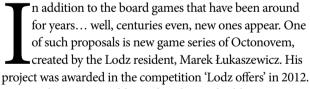
TooNE Beautiful Craftwork Storehouse makes plans for the expansion of a network of avant-garde boutiques. – We dream of opening the branches in the next two cities in Poland. After all, this city loves fashion... – the owners mention.

Dorota Szczęśniak talks about the existing rich cooperation and new paths of contact with other artists in OFF Piotrkowska circles. – First of all, we are bound with Wi-Ma, currently acting as a zone of alternative actions. We participate in all possible projects in the postindustrial space of Widzewska Manufaktura. We participated in the night of open workshops during the Design Festival. We participated in Towary, now we are preparing for Urban Tribes. We conducted artistic winter holidays and perhaps we can organize summer camps and outdoor urban activity. We are planning the Remembrance Arcades or the Festival of creative anxiety.

Photo: Paweł Ławreszuk, Krystian Szczęśniak

Renaissance on the game-board

TODAY, WHILE TALKING ABOUT A
GAME, WE USUALLY MEAN PLAYING
IT ON THE COMPUTER OR CONSOLE.
IN TERMS OF ENTERTAINMENT
GAMES WE RARELY THINK OF BOARD
GAMES. HOWEVER, BORED WITH
INTERACTION WITH VIRTUAL
OPPONENT, WE MORE AND MORE
OFTEN RETURN TO POPULAR
BOARD GAMES, WHICH GIVE US THE
OPPORTUNITY TO INTERACT WITH
ANOTHER PERSON.



Logical games are addressed to those who like to exercise their grey cells. The action of each of the four games is played on the board with dimensions 8x9 fields, hence the origin of the series name, which refers to the Latin translation of the words 'eight' and 'nine'. The games differ in degree of difficulty and strategy scenarios. Each game is addressed to two players.

As the author recollects, his interest in creation of board games began with reading the book by Erich Frauwallner, entitled 'The History of Indian Philosophy'.

– I decided to draw from the atmosphere of times when the chess game was forming and I began to create my own games – says Marek Łukaszewicz.

This is how Angulus, Nubulus, Prosterno and Basileus were created, translating into Polish as Angle, King, Knockout and Cloud. Their action takes place on the board of 72



fields. Despite the unusual type of board the rules of the game are transparent and can be learnt in a short time. In the game Nubulus the player has to lead the pawn to the other side of the board, on the way moving and taking the opponent's spillikins. This game is similar to checkers, but its rules present some extra difficulties. Prosterno stands out thanks to the interesting and original, in comparison to the other board games, concept of taking the opponent's pawns, whilst Basileus, which seemingly is most similar to chess, turns out to be completely unique during the play. The aim of the Basileus is to capture the opponent's king.

Marek Łukaszewicz's games are promoted by the Lodz Chess Association and were successfully tested in the Polish Mensa. The games are very versatile. – Professional chess and checkers players can play, and so can parents with children – explains the games author. His words are confirmed by the fact that industry titles write about Octonovem all around the world – from Germany to the United States.

Marek Łukaszewicz's games can be bought in the chess shop Caissa. You can also play online on the portal playboardgames.pl.

Creativity Machine

hat kind of a tale do you want to hear?

– it is the first question the actors ask the young audience in their improvised play entitled 'Storytelling machine' at Pinocchio Theatre in Lodz.

- About 'Red Riding Hood', 'Pinocchio' and 'Cinderella' the children respond in a predictable way.
- This machine tells just such fairy tales which are not yet available. What story do you want to hear then?the artists challenge the young audience.
- About an escaping puzzle, about a boy who lived in a pocket or about a friend who went into space in search of a chocolate planet – small recipients of culture let their imagination run, and the actors begin to tell a story about distant lands and unusual characters.

Children encounter in the theater the conventional world suspended between imagination and reality. They enter it with their habits and patterns of thought. However, a simple impulse of artists is enough for children to believe that an invisible three-headed dragon lives in a cardboard box, and that there is a bizarre, little spooky house on the other side of a mysterious door. Small viewers leave the performances intrigued, with heads full of questions and genuine reflections. This is how creativity awakens and develops.

These daily drama observations are confirmed in the subject literature. As we read in the publication entitled 'Culture and Development': 'Creativity is a human ability to generate valuable ideas and solutions in every area of life. Formerly, it was believed that creativity was a characteristic of artists and was a supernatural gift. Today we know that this skill is available to everyone, and that it can be stimulated and enriched. (...) One of the ways to develop creativity is cultural education. It prepares to participate in a cultural life and teaches the habit of absorption of culture. It shapes personality, teaches patterns of behaviour, norms, hierarchies of values, skills as well as abilities to make judgments and choices. It is a source of inspiration in various spheres of life. It helps young people to choose a career path that can often move towards the creative industries'.

We – adults are intermediaries in young audience's meeting with the magic of theatre. Let us take care of it. Thanks to performances and theatre related events on the highest artistic level, our children continually deve-



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lop their imagination and intellectual potential. At the same time, by tightening the relationship between the world of children and adults, every day we learn from the young audience about openness and sensitivity in the perception of art and perception of the world around us. Let's create a common space for conversation, thoughts and fantasies. Let's power the Creativity Machine.

Kamila Majchrzycka Head of Promotion and Popularisation of Pinocchio Theatre in Lodz

More information about cultural education at Pinocchio Theatre in Lodz can be found at: www.teatrpinokio.pl

Literature: Kultura a rozwój, red. J. Hausner, A. Karwińska, J. Purchla, NCK, Warszawa 2013.



WHEN VISITING LODZ, IT IS WORTH SPENDING A FEW HOURS ON SEEING THE MOST INTERESTING TOURIST DESTINATIONS. THE CITY ENCOURAGES VISITORS TO SEE THE HISTORY OF FOUR CULTURES. IT IS RICH IN ARCHITECTURAL, FILM AND FASHION ATTRACTIONS. WE WILL BE ALLURED BY CAFÉS, TEA ROOMS AND WE WILL TASTE SPECIALTIES OF THE RICH LODZ CUISINE. ONCE WE GET SUCKED INTO THE WHIRL OF LODZ ADVENTURE, WE WILL NOT REMAIN INDIFFERENT TO THIS CITY.

he most characteristic of Lodz are the factories made of red brick, tenement houses, palaces and manufacturers' villas. The most popular buildings visited by tourists are those located along Piotrkowska Street, on the territory of the former Poznań Empire and within the Priest's Mill.

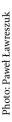
PIOTRKOWSKA

It is the most frequently visited street in Lodz, along which visitors can see many architectural buildings from the late nineteenth and early twentieth centuries. They form the historical backbone of the city, on the basis of which one of the largest textile centres of Europe was created in the nineteenth century. Visitors can take a rickshaw or see the monuments , i.e. the Three Manufacturers, J. Tuwim's Bench or the Monument of Citizens of Lodz at the Turn of the Millennium – 12 859 cubes with engraved names. When visiting Pietryna, tourists can

look at the facades of tenement houses, combining historical, classical, romantic and modernist motifs. One of the most charming buildings is the Gutenber House (No. 86). A few numbers further, tourists can see the magnificent Grand Hotel (at No. 72) and the buildings of such former hotels as Polski (No. 3) and Victoria (No. 67). After an exciting tour around the most interesting places of Pietryna, there is a time for something extra, i.e. relaxation typical for Lodz. Leisure facilities in Lodz include countless numbers of excellent restaurants, bars, cafes, pubs and shops. Visitors must also see the backyard of the former RAMISCH factory – OFF Piotrkowska, associating musicians, artists, designers, entertainers, fashion designers and other creators of OFF Piotrkowska culture.

MANUFAKTURA

Manufaktura is one of the largest centres of culture, entertainment and commerce in Europe. In this place, revitalisation,





unique in Poland and Europe, has been conducted. It combines modern forms and architecture of the restored nineteenth-century buildings of the former factory of Izrael Poznański. Now, it houses the Museum of the City of Lodz, where visitors can learn about the history and culture of the nineteenth-century industrial metropolis. The permanent exhibition called 'Pantheon of the Great Citizens of Lodz' shows the profiles of eminent artists associated with the city: W. Reymont, J. Tuwim, J. Kosiński, K. Dedecius and A. Tansman. The 20 ha of Manufaktura include, among others, market with coloured fountains (the place where festivals, concerts and outdoor events are held), Factory Museum, ms2 Museum of Art, restaurants, more than 300 shops, discos, bowling centre, climbing wall, multiplex cinema and the hotel with a pool.

PRIEST'S MILL

This is an extensive district, which looks as if it was from the period when industrial Lodz flourished. In the nineteenth century, Karol W. Scheibler - one of the greatest manufacturers in Lodz - built a complex of industrial-residential buildings, a kind of city within a city. Its urban layout and architecture were modelled on English industrial settlements. The Priest's Mill includes systematically arranged and architecturally uniform factory buildings, residential housing estate, residences of owners and executive villas with gardens, as well as streets and railway sidings, school, two hospitals, fire station, gas plant and factory club.

The quarter is located between Tymienieckiego, Przędzalniana, Fabryczna and Kilińskiego Streets. In the historic place of the city, there are numerous investments implemented.

The former school building was transferred to the Academy of Fine Arts, where the Institute of Design will be established. Herbst Palace was also renovated for the purposed of the Museum of Art. The plan is to revitalise the Priests' Mill – a green welcoming space, protecting the post-industrial heritage, is to be created there.

MUSEUMS

Lodz museums enjoy unfading interest. The Central Museum of Textiles (Piotrkowska Street 282) expanded its offer by multimedia exhibition in 2013. The 'National Geographic Traveller' magazine considered the museum to be one of the seven new wonders of Poland.

Lodz is also associated with the art of film. At Zwyciestwa Square 1, there is the Film Museum. There, visitors can learn about the secrets of film sets, laboratories and the history of

Those who are interested in film topics should visit the following address - Łakowa 29, where the institutions and companies associated with the films are located. In place of the former Wytwórnia Filmów Fabularnych (Feature Film Studio), in 2013, the largest monument of the Polish film was created. The scene of the first post-war Polish film entitled 'Forbidden Songs', formed just at WFF, was inscribed on the facade of Double Tree by Hilton Hotel. The scene was created owing to glass panels in various shades of gray put in the facade. Thanks to this, a mosaic effect was created.

After many months of renovation, the Museum of Art at Wieckowskiego Street 36 has opened the public one of the most recognisable areas - Neoplastic Room. After the restoration of the interior, Herbst Palace was restored to its former splendor. The beauty of the factory interiors from the late nineteenth and early twentieth century delights the visitors.

FOR THE YOUNGEST

The family tourist trail 'Fairy Lodz' leads through the traces of monuments of the characters from films and TV series for children, created in Se-ma-for Short Films Studio. Three Bears invite visitors to the Museum of Textiles and Heritage Park. The 'Uszatek' Teddy Bear welcomes guests in front of the Tourist Information Centre on Piotrowska Street. Small penguin called Pik-Pok invites visitors to Aquapark Fala. Filemon and Bonifacy cats stretch out lazily in front of the Film Museum. Plastuś invites children to school with his bell. Piotruś and his dog draw with their magic pencil on the wall of Lodz Culture House. In 2013, they were joined by Ćwirek Sparrow, which sits on the nest in front of the entrance to the Palm House. Maurycy and Hawranek invite guests to the zoo. The visit to old friends from fairytales is a must on the tourist trail.

> Daria Szymańska, Office of the Promotion, Tourism with Foreign Countries Shape The City of Lodz Office and Cooperation with Foreign Countries

32ND THEATRE SCHOOLS FESTIVAL IN LODZ 6-11 May

LODZ FILM SCHOOL WWW.FILMSCHOOL.LODZ.PL

FASHIONPHILOSOPHY FASHION WEEK POLAND

6-10 MAY

EXPO-ŁÓDŹ SP. Z O.O., AL. POLITECHNIKI 4 www.expo-lodz.pl, www.fashionweek.pl

ANDRÈ RIEU'S CONCERT

9 MAY, 8.00 PM

ATLAS ARENA IN LODZ,

AL. KSIĘDZA BISKUPA WŁADYSŁAWA BANDURSKIEGO 7 www.atlasarena.pl

PETER GABRIEL'S CONCERT

12 MAY

ATLAS ARENA IN LODZ.

AL. KSIĘDZA BISKUPA WŁADYSŁAWA BANDURSKIEGO 7 WWW.ATLASARENA.PL

2ND TRADE FAIR OF LOGISTICS UNIFORMED SERVICES — TLSM

13-14 MAY

EXPO-ŁÓDŹ SP. Z O.O., AL. POLITECHNIKI 4 www.expo-lodz.pl

'DZIATWA 2014' POLISH NATIONAL REVIEW OF CHILDREN'S THEATRES

14-17 MAY

'RONDO' BALUCKI CULTURAL CENTRE, UL. LIMANOWSKIEGO 166 WWW.BOK.LODZ.PL

FAMILY FAIR, HOUSE FLAT INTERIOR FAIR

17-18 MAY

EXPO-ŁÓDŹ SP. Z O.O., AL. POLITECHNIKI 4 www.expo-l odz.pl

NIGHT OF MUSEUMS

17 MAY

JUWENALIA OF THE UNIVERSITY OF LODZ

26-31 MAY

THE UNIVERSITY CAMPUS OF THE UNIVERSITY OF LODZ
— LUMUMBOWO

4TH INTERNATIONAL BIENNIAL OF 'QUADRO ART 2014' PICTURE

29 MAY, 1.00 PM

CENTRAL MUSEUM OF TEXTILES, UL. PIOTRKOWSKA 282 WWW.MUZEUMWLOKIENNICTWA.PL

4TH THEATRE CAROUSEL FESTIVAL 2014

30 MAY-8 JUNE

PINOCCHIO THEATRE, UL. KOPERNIKA 16 WWW.TEATRPINOKIO.PL

AVENGED SEVENFOLD'S CONCERT

4 JUNE

ATLAS ARENA IN LODZ, AL. KSIĘDZA BISKUPA WŁADYSŁAWA BANDURSKIEGO 7 WWW.ATLASARENA.PL

BUSINESS 2 BUSINESS FAIRS

5 JUNE

EUROPEAN INSTITUTE. UL. PIOTRKOWSKA 262

45TH CONGRESS OF POLISH OPHTHALMOLOGISTS

5-7 JUNE

EXPO-ŁÓDŹ SP. Z O.O., AL. POLITECHNIKI 4 WWW.EXPO-LODZ.PL

O!PLA 2ND NATIONAL FESTIVAL OF POLISH ANIMATION

i—8 JUNI

MUSEUM OF CINEMATOGRAPHY, PL. ZWYCIĘSTWA 1 www.kinomuzeum.pl

13TH INTERNATIONAL FESTIVAL OF PHOTOGRAPHY IN LODZ

5-15 JUNE

ART_INKUBATOR, ART FACTORY, UL. TYMIENIECKIEGO 3 www.artinkubator.com

LODZ 4 CULTURES FESTIVAL 2014

6-15 JUNE

WWW.4KULTURY.PL

IMPACT FESTIVAL 2014

11-12 JUNE

ATLAS ARENA IN LODZ.

AL. KSIĘDZA BISKUPA WŁADYSŁAWA BANDURSKIEGO 7 www.atlasarena.pl