Lectures

L5.1

Scientists in European Union: ideas, innovation and inventions — who will take the benefits?

Tomasz Twardowski
Technical University of Łódź and Institute of Bioorganic Chemistry, Polish Academy of Sciences, Poznań, Poland
e-mail: Tomasz Twardowski <twardows@ibch.poznan.pl>

The majority of ideas related to modern biotechnology were born on the Old Continent, but intellectual property rights are located mostly in North America. It means that even if the European scientists have a great potential the benefits will be gathered mostly by America. The best and most striking example is agriculture. Following the recent proposals of the European Commission, production of GM plants will be illegal in several EU countries. However, we will import the food and feed from South America. But we should be aware that the innovations and inventions are protected by patents and the owner of intellectual property rights is the beneficiary.

L5.2

Adventure Innovation: from the brilliant idea to a successful product

Wolfram Meyer, Manfred Cassens
European Patent Organization, Munich, Germany
e-mail: Wolfram Meyer <wmeyer@epo.org>

The move towards a knowledge society is frequently cited as behind the emergence of a so called “pro IP” area over the past two decades. This era can be characterized by (i) a growing importance of the value of intangible assets and intellectual property for many companies and in many industries and (ii) a sharp rise in demand for the means to protect intellectual property through the system of Intellectual Property Rights, most notably patents. The main innovation-driving elements in the European Union are Small and medium Enterprises (SMEs), start-up and university spin offs mainly within the High-Tech Area, to which life science belongs. They are flexible and much faster in the exploration of the market as large-scale enterprises. A key question for any new innovation could be: Is the idea really new and marketable? How do I establish a team of founders? These and other questions are often ignored by entrepreneurs or not sufficiently thought through. Adventure Innovation, a soon to be published book explaining the steps to be taken in order to generate financial resources and to escape traps on the way of founding a successful SME.
L5.3

Dynamics of innovation processes in biotechnology – implications for SME

Thomas Reiss
Fraunhofer ISI, Germany
e-mail: Thomas.Reiss@isi.fraunhofer.de

Innovation processes in science driven fields such as biotechnology frequently are characterized by a dynamic inter-relationship between science push and market pull factors leading to a typical so called double boom pattern of innovation dynamics. Following the discovery of new phenomena new technological principles and possible scientific solutions to existing questions are explored on a broad basis and transferred to other fields. A first boom which can be labeled science-push or technology-push cycle is emerging triggering substantial technological activities with considerable market prospects. However, since biotechnology driven innovations usually are complex they often run into problems at early stages. Expected contributions to product or process development cannot be realized as expected or take much more time. From the perspective of firms, the period of five to eight years between the start of a field and the peak of the first boom is obviously quite long, and they react by decreasing their research or even by completely dropping out. During this period a reorientation of R&D activities takes place taking into consideration much more intensively market needs for the new products. This leads to a second boom which finally enables market introduction of the innovation. Being aware of this double boom characteristics of complex innovation processes is an important requirement for biotechnology entrepreneurs in order to identify the right window of opportunities in the innovation cycle. The presentation will illustrate this principle with examples of different biotechnology innovations.

L5.4

The birth and growth of spin out company (in Poland)

Piotr Tamowicz
Initiative for Capital & Governance
e-mail: Piotr Tamowicz <ptamowicz@icg.gda.pl>

Sector spin outs/offs in Poland growes through stages. What are success factors for candidate entrepreneurs? Is it management team or selection of target market or acces to VC? What processes really support the birth of spin off/outs?

L5.5

New models for faster adoption of innovations

Jakob Rassmussen
Interlaceinvent, Livinglabs-global
e-mail: Jakob.Rassmussen <info@interlace-invent.com>

Recent reports by the European Commission have underlined the European "Innovation Gap". Europe is a global leader in R&D and patents, but for several reasons not enough research results make it to the market when comparing with Europe’s competitors. It has been outlined, that one of the key challenges is lack of large, transparent, and innovation-friendly markets in Europe that can help innovative companies bring their innovations to international markets in a fast and efficient way. Living Labs Global, a non-profit association of cities in Europe and internationally, has taken up this challenge. The presentation will show the models deployed by the Living Labs Global network, and explain how barriers to market entry for innovations can be lowered. Furthermore, the presentation will share experiences and results from Europe and internationally in furthering the uptake of innovation in society and industry for the benefit of firms, citizens, and society.