

TECHNOPARK® Zurich – The First Decade: A Success Story

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Abstract: TECHNOPARK® Zurich opened its doors ten years ago with the ambitious goal of providing the facilities and support for technology transfer from the academic institutions to industry. Since then the Technopark concept has proven itself convincingly with almost full occupancy of the building with tenants from ETH and University of Applied Sciences Zürich institutes and new and established startup and spinoff companies. The success of the Technopark has also contributed to a revival of the immediate neighbourhood and the concept is now being repeated in Winterthur and Lucerne. The recent Jubilee celebrations were marked by speeches by local dignitaries and the award of the TECHNOPARK® Zurich Foundation Prize to **innovation wood (iwood AG)**.

Keywords: ETH Zürich · Spinoff · Startup · TECHNOPARK® Zurich · University of Applied Sciences Zürich

Ten Years – A Technological Lifetime these Days

TECHNOPARK® Zurich was opened just over ten years ago on March 25, 1993. During that time the half-life in technology has shrunk to less than three years, so that one decade is a very long time in the startup and young company scene.

The idea of building Technopark Zurich was first hatched in the mid-eighties, by two different personalities. On the one hand it was Albert Hafen, production manager at Sulzer Escher Wyss Zurich, who proposed making the increasingly derelict 20,000 m² works site available for a technology park. At about the same time Dr. Thomas von Waldkirch, head of Technology Transfer and Industrial Contact at the ETH Zurich, convinced Mayor Thomas Wagner how important such a Technopark would be for

Zurich city and canton. An article by Wagner published in the *Neue Zürcher Zeitung* then triggered political interest in the idea. And when Albert Hafen gathered some key investors including Rentenanstalt/Swiss Life, the Zurich Cantonal Bank and Winterthur Insurance, the foundation stone for Technopark Zurich was laid. The economy was very prosperous in the mid nineteen-eighties, and the idea of difficult times ever coming again seemed unimaginable. The initiators therefore went ahead energetically with this ambitious project, and by the end of 1992 the transfer hall and three wings of Technopark Zurich were completed with a total floor area around 45,000 m².



Difficult First Phase

By the early nineties the economy was no longer so prosperous, and the difficult situation was comparable to that now in 2003. As a result, about one million square metres of commercial and office floor area

lay unutilised in and around Zurich city. It was therefore very hard to find tenants for the Technopark. The ambitious project was increasingly criticised as a result, sometimes very sharply. A good many decision-makers and the media saw no point in the Technopark Zurich. “Switzerland is too small for such projects”, said some, “the technology transfer scene is already established, and everyone knows each other, so we need no technology centre”. Startup companies and the support of young entrepreneurs was a new theme, requiring intensive PR and information work. Hardly anyone realized then how important a fertile environment and culture are to startup companies for developing their business projects and activities.

During that time, the patience and goodwill of our shareholders was decisive. Without their determination to carry on the project despite opposition, we would never have been able to celebrate our 10-year jubilee in 2003.

In parallel, the ‘New Economy’ trend dominated in the mid-nineties, focusing on highest possible short-term stock market earnings. At that time a startup company could make a substantial profit without appreciable performance, simply by going public. This generated a scene where short-term stock market gains were exploited – at the expense of genuine economic worth in terms of long-term profitability and value creation.

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Sustainable Job Creation

Thanks to its excellent infrastructure and outstanding connections in the innovation and industrial scene, the Technopark Zurich has in the meantime created an environment of stimulation and self-reliance for startup companies and established firms alike. The 183 companies domiciled here today are committed to sustainability and offer employment which can withstand the storms of this new millennium. Since the founding of Technopark Zurich, these companies have created around 1000 new jobs and contributed about CHF 20 million to the Swiss fiscus. This performance is all the more remarkable in view of the fact that the Technopark Zurich enjoys no subsidy of any kind and is financed entirely by Technopark Immobilien AG, now jointly owned by Rentenanstalt/Swiss Life, Winterthur Insurance and the Zurich Cantonal Bank.

A Highly Reputed Address

Furthermore, the Technopark Zurich has always been a quality seal for the companies domiciled here. 'Technoparkstrasse 1' is an address that opens doors and engenders confidence among potential customers, partners and employees alike. All prospective Technopark companies know today that they will be closely examined by the advisory committee, and must present a business plan meeting the high standards of the Technopark Zurich Foundation and Technopark Zurich Immobilien AG.

During the course of the last ten years, the Technopark Zurich has increasingly gained prestige. Today this success story is regarded both by the media and industry as a benchmark for related projects. The Technopark has not only met its challenges with regard to real estate interests, but right from the outset – also in times of economic decline – has undertaken all efforts to promote innovation and technology transfer throughout Switzerland as well as in Zurich. The Technopark Zurich Foundation has taken the initiative of forming an Association of Swiss Technology and Founder Centres known today as 'SwissParks.ch' which plays a leading role in the Technopark Zurich. It was also the first institution in Switzerland to promote a 'Business Angels culture' in Switzerland by creating the first Swiss platform for this purpose under 'Initiative Startups'. In the meantime various other business angels clubs have been formed nationwide. Since the beginning of 2003 they belong to the ASBAN, Association of Swiss Business

Angels Networks. ASBAN focuses on the importance of business angels in industry and society, and represents their political interests. The Director of the Technopark Zurich Foundation, Dr. Thomas von Waldkirch, has been elected as the new ASBAN President.

Leading in Facility Management

Technopark Immobilien AG has not only proved itself right from the beginning with excellent management and rigorous cost control, but has also developed methods and tools for which it became the first non-German company to win the coveted Facility Management Award a few years ago.

The success of the Technopark Zurich has also enabled the 'TECHNOPARK®' brand to be patented. Today there are already two licensees: TECHNOPARK® Winterthur and TECHNOPARK® Lucerne. Furthermore, the two directors of the Technopark Zurich offer their vast experience and know-how to their partner parks and other related real estate projects.

Some Facts and Figures for 2003

Unrented floor area per beginning of 2003 totalled 568 m², corresponding to a rental quota of 98.7%. Per year end 2002, Technopark Zurich tenants included 121 young companies with ETH projects and spin-offs. They occupied a floor area of 20,931 m², almost half the total floor area of 44,300 m². Technopark Zurich currently has 138 tenants, 25 subtenants, 9 ETH spin-offs and 11 ETH projects, *i.e.* a total of 172 companies plus 11 ETH projects.

Over the last five years tenant changes caused about 125 floor area modifications

per year on average, of which 53 (41.78%) comprised expansions. This figure reflects the entrepreneurial success of the small and startup companies at Technopark Zurich. In 2002, 30% of floor area modifications comprised expansions (in 2001: 40%). It is also encouraging that 21 new companies moved to Technopark Zurich in 2002, as against 'only' 12 in 2001. Expansion of young companies dominated in terms of floor area as against new companies, whose floor area requirements are generally lower despite their large number.

The TECHNOPARK® Zurich Foundation Prize

Since 1991 the TECHNOPARK® Zurich Foundation Prize has been awarded annually for outstandingly innovative projects exhibiting a high degree of originality, quality and marketability. In our jubilee year this prize was awarded to Christoph F. Affentranger, Partner and CEO of Innovation Wood (iwood)®.

The TECHNOPARK® Zurich Foundation Prize has been sponsored since 2001 by the Zürcher Kantonalbank, and is therefore known as the ZKB Pioneer Prize Technopark®. In addition to the actual prize money, the ZKB also makes a substantial contribution to the award ceremony and PR outlay for the prize-winner each year.

The unusual prize sum of CHF 31,415.92 is ten thousand times the value of π or 'pi', the first two letters of pioneer. Since π signifies not only science and technology, but also the classical quadrature of the circle, it has been adopted as the award symbol.

The selection criteria for this award are: degree of innovation, social relevance, market compliance, and science-technology transfer.



From left to right: Martin Zollinger, Vice-Chairman Zurich Cantonal Bank (ZKB) Commission, Christoph F. Affentranger, innovation wood (iwood)®, Otto Hofstetter, innovation wood (iwood)®, Richard R. Ernst, Nobel Laureate, ETH Zürich

The business concept of our latest prize-winner *innovation wood* (*iwood AG*) comprises an innovative biotechnical process, protected by several patents, for producing environment-friendly and cost-effective chipboard to market maturity for sale to the furniture and construction industry. This lightweight *SLP chipboard* made of sawdust differs from normal chipboard inasmuch as no glue is used in the manufacturing process. The new material can be sawn, drilled, and glued just like conventional chipboard. It is amazingly strong with regard to screw retention, for example, and can be sanded and planed without the slightest problem. Nevertheless, its weight is only half to one third that of solid wood, conventional chipboard or MDF board. This innovative SLP chipboard conserves resources by utilizing timber industry residues. Thanks to the environment-friendly production process it also saves considerable material and disposal costs, and is very user-friendly due to its low weight. By the year 2020 an estimated deficit of 1.44 billion cubic metres is expected in the timber industry. If the ongoing destruction of our global forests is to be stopped, this deficit can only be made up by using more economical production methods and new materials. The *iwood* concept offers an ideal solution here in many ways.

The prize award ceremony in spring 2003 was a very high-level occasion. Prof. Dr. Richard R. Ernst, winner of the 1991 Nobel Prize for Chemistry, presented the award within the framework of the Technopark Zurich's tenth anniversary celebration.

Jubilee Celebration

On March 25, 2003 a fittingly original and innovative celebration was held to mark the tenth anniversary of the Technopark Zurich. More than 600 distinguished guests from industry, science, and politics were welcomed during the late afternoon in completely transformed surroundings. Undulating textile rivers flowed through the imposing transfer hall, and 35 companies demonstrated their latest innovations while acrobats and tightrope artists symbolized the start-up situation of young technology-oriented companies. Appropriate culinary delights and musical entertainment were also provided. The formal part of the ceremony included speeches by Zurich Council President Prof. Dr. Ernst Buschor, Technopark Immobilien AG President Alois Weibel, Zurich Mayor Dr. Elmar Ledergerber, and Zurich Technopark Foundation President Dr. Thomas Wagner,

who paid tribute to the *Pi*-award prize-winner. The final highlight was an address by Nobel Prize winner Prof. Dr. Richard R. Ernst. He drew attention above all to the decaying values in today's society, symptomatic by the greed of global economy leaders, irresponsible company managements, and moral corruption – coupled with the increasing lack of discipline among young people. Richard Ernst also expressed his opinion of the Iraq conflict, telling off the US government in no uncertain terms for its military intervention. Reactions over cocktails afterwards varied widely, ranging from enthusiastic agreement to head-shaking rejection. But Nobel Prize winners can take more liberty than others in saying what they think. And at the Technopark Zurich, all kinds of opinion are traditionally open to debate.

Innovation Promotion by the ETH at TECHNOPARK® Zurich

Dr. Matthias Erzinger, head of research and industrial relations ETH transfer, pointed out that the Technopark Zurich engagement is one of the most important ETH Zurich interfaces with industry and innovation. Over the last ten years, nearly 50 ETH Zurich spinoffs have found their feet in the Technopark. At the same time the Technopark Zurich provides research groups in widely varying disciplines with the ideal environment for closing the gap between basic research and innovative applications in private industry.

The ETH Zurich was the first tenant at Technopark Zurich. Part of the area rented out to the ETH is traditionally allocated to spinoff companies emerging from ETH research projects, who thus have low-cost offices and laboratories at their disposal for up to two years. Afterwards they are expected to have grown to the point where they can move to premises outside the ETH

zone. At the beginning of 2003 seven spinoffs were located in the ETH zone of Technopark Zurich, some with impressive growth potential – such as Thales Technologies or Miromico. The activities of these startup companies range from materials sciences and e-learning to software development and medical technology. Several earlier ETH spin-offs are now established in other parts of the building and elsewhere, thus forming an ever-growing network.

The ETH Zurich also attaches great importance to the research groups bridging the gap between basic research and industry at Technopark Zurich. These include for example the Center for Chemical Sensors, the space biology group, the institute for automated production, and other research groups in solid-state physics, food engineering, mechatronics, ergonomics, and technology.

University of Applied Sciences Zurich at the TECHNOPARK® Zurich

The Applied Research and Development department of University of Applied Sciences Zurich (HSZ-T) has been a Technopark Zurich tenant since 1999. This is Switzerland's oldest job-based technical training institute. According to HSZ-T vice-director Dr. Nyazi Ari, the lecturers generally have an ETH diploma or equivalent and mainly work in industry, commerce or research. This practical orientation guarantees the ongoing knowledge transfer which is also reflected in the diploma dissertations on current themes. Various interesting projects in cooperation with industrial partners have been concluded successfully. Cooperation agreements also exist with other research centres and universities in Sweden and Turkey, already resulting in five dissertations. Apart from 14 workstations, the HSZ-T also has a seminar





From left to right: Heinz Specker, CEO Technopark Realstate Ltd., Thomas von Waldkirch, CEO Technopark® Zurich Foundation, Thomas Wagner, President of the Technopark® Zurich Foundation Board, Alois Weibel, Managing director Wincasa (Wintherthur Insurance)

room and laboratory facilities, including an EMV measuring chamber. Thanks to the innovative environment and contact with other young groups and entrepreneurs, promising synergies arise again and again.

The Neighbourhood

The Technopark Zurich clearly has a strong influence on its neighbourhood. In the early nineties this locality was dominated by abandoned industrial buildings, the infamous Zurich drug scene, and neglected apartment blocks. Only a few years later, dynamic development here led to the fashionable 'Zurich-West' district, now known well beyond Switzerland as Zurich's boom quarter. Numerous new apartment and office blocks have arisen here in recent years.

Other large ex-industrial sites such as Maag Plus, Toni or Albers/Hardturm Immobilien have been included in local zone planning for comprehensive redevelopment in the near future to provide 6500 apartments and 28,8000 new jobs. With modern leisure centres such as Zurich Stadium, new streets and squares, this district will be further upgraded for better living quality. As always, however, such development brings traffic problems in its wake, which are not easy to solve. The cantonal highway planning project is still not mature, and no respective agreement has yet been reached either in the district as a whole or among local property owners. The Zurich-West Property Owners Association supports sustainable traffic planning projects. Technopark Immobilien AG director Heinz Specker is vice-chairman of the Association, which

aims for an acceptable combination of public and private transport to ensure an intact standard of living in this city-oriented quarter.

In autumn 2003 'Turbinenplatz', one of Zurich's biggest squares whose name harks back to the fame of Escher Wyss water turbines, is due for completion right in front of the Technopark Zurich. This will be the final chord (for the time being) of a long symphony whose opening bars began years ago, when work started on developing the former Sulzer Escher Wyss site into a new quarter of Zurich urban district 5. The prospering Zurich-West quarter will certainly become even more attractive over the next few years.

Received: April 29, 2003