**Empa one of “the *smartest* places on Earth”**

**A new book investigates where innovations are born. Besides the classic rustbelt in the northern USA, the authors also place Europe and Switzerland under the microscope. And they are impressed by what Empa achieves here.**

Text: Paul W. Gilgen\* / PHOTOS: PublicAffairs Books

Perhaps the title *The Smartest Places on Earth* can also be understood as “the most exciting places in the world”. After all, as the subheading reads and the illustration suggests, the book is about the thrilling transformation of rundown industrial regions (primarily in the US) into bubbling hotbeds of innovation. This doesn’t just mean an inevitable structural change in the economy and the adaptation of its value creation processes (which the famous Austrian economist Joseph Alois Schumpeter refers to as “creative destruction”), but also the regeneration of society and its institutions in the early 21st century.

The two authors analyze a large number of these “rustbelts” in the US, outline the astonishing transformation there and describe its success factors. They are always the same: assisted by “bridge builders” (whom the authors dub “connectors”) at the respective interfaces, close cooperation in the form of public private partnerships (PPP) between science, industry and politics, that is:

* universities and research facilities that are organized in a multidisciplinary way and open to collaboration with industry
* companies, which focus on modern, knowledge-based sectors (e.g. micro-/nanotechnology, medical engineering, life sciences) and are open to collaboration with science
* governments, which create future-shaping framework conditions (e.g. in the incentives to found start-ups, in fiscal policy and venture capital (VC), in job market regulations, etc.). In the US, this form of cooperation has been exemplified highly successfully for quite some time by the Research Triangle Park (RTP) in North Carolina.

Moreover, from several cradles of innovation (“brainbelts”) in Europe, the authors selected five, which they visited and analyzed, conducting lengthy interviews: Dresden (Germany), Eindhoven (Netherlands), Lund-Malmö (Sweden), Oulu (Finland) and Zurich (Switzerland). The authors laud dual vocational education and training wherever it exists in Europe (including Germany and Switzerland) as a success factor and a competitive advantage, and lament the lack of such educational structures in the US as a major shortfall.

The chapter on Zurich is entitled “Zurich: A New Kind of Currency”. While the old “currency” consisted of financial and insurance companies and the associated financial center, the new “currency” is primarily being minted by the life sciences. Charles Weissmann (ETH Zurich) and his start-up Biogen AG is right at the beginning of this new era. And the foundation of the Bio-Technopark™ in Schlieren is the obvious continuation. The involvement of Novartis and Roche in the fledgling companies settled there just goes to show how the life science cluster stretches from Zurich to Basel. And although the choice of Basel over Zurich for ETH Zurich’s SystemsX (system biology) department initially came as a surprise, the decision was, therefore, logical and well-founded.

The authors go on to describe the first technology park – the one in Zurich – and the spread of this successful model for a technology park throughout Switzerland. The major achievements of the longstanding director Thomas von Waldkirch are granted the recognition they deserve – today, the Technopark Zurich Foundation is presided over by Empa CEO Gian-Luca Bona.

Applied research as a cornerstone for modern production

And finally, under the heading “Basic and Applied Research”, three research institutions – the Fraunhofer Society (Germany), TNO (Netherlands) and Empa (Switzerland) – are examined thus: “... most important is the extensive network of public-private entities, they are key building blocks in the creation of the smart manufacturing world in which sharing brainpower is essential.” The book’s authors hail Empa, its focus and its achievements together with its affiliated start-up incubators, and particularly emphasize how efficiently the knowledge acquired here is shared and disseminated.

As far as innovation is concerned, being classed among the most exciting places in the world is tantamount to an accolade. Empa can thus feel vindicated in continuing along the path the institute has been pursuing.

\*Paul W. Gilgen, was an assistant to Empa director Louis Schlapbach and previously ran the departments of “Ecology” and “Marketing, Knowledge and Technology Transfer”. He retired in 2010 after 23 years at Empa.

Caption: The fact that the 308-page book contains only a handful of illustrations renders this figure all the more meaningful.