

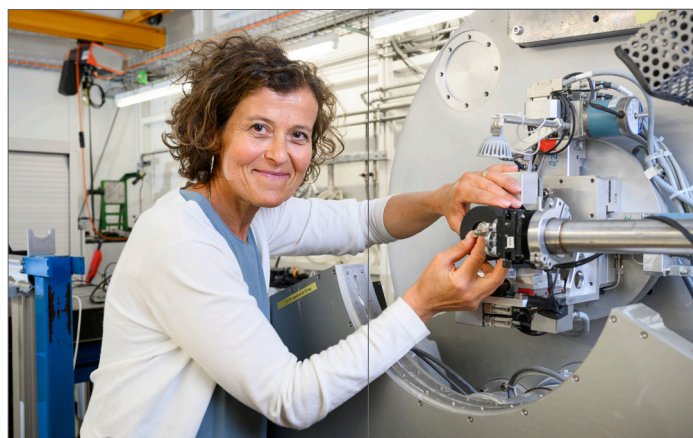
Using the gold standard: Excelsus Structural Solutions

What motivated you to start Excelsus Structural Solutions?

Fabia Gozzo: I have been a beamline scientist at the Swiss Light Source responsible for the construction and development of the Powder Diffraction Station for approximately twelve years before founding Excelsus Structural Solutions. During those years I have developed the interest in industrial applications and contributed to promote them. I had, however, a different view on how industrial applications of synchrotron radiation should have been conducted, which I implemented at Excelsus Structural Solutions. The business idea was there already, the opportunity came with the decision to support an important career opportunity offered to my husband, which required leaving the country. I saw the opportunity for me to exploit the competences acquired and the reputation gained in the previous years to realise those ideas and founded the company. Retrospectively, I believe timing has been very good.

What are the problems or challenges that your company offers a solution for?

Excelsus Structural Solutions offers analytical services based on the use of synchrotron radiation and x-ray powder diffraction technique (*synchrotron-XRPD*) for the analysis of qualitative and quantitative structural and microstructural properties of materials. Although synchrotron-XRPD can be virtually applied to the study of any material, we focus on applications to pharmaceutical compounds, active pharmaceutical ingredients (*APIs*) and formulated drugs. I made this choice because we not only offer the development of customer-tailored experimental set ups and data collection at synchrotron facilities, but also expert data analysis and interpretation. This requires keeping the focus on a specific field of applications. I do not exclude, however, that in the future we might develop other lines of research and development, for example with the acquisition of a collaborator with specific competences, ambitious goals and the right mindset.



Fabia Gozzo, CEO and Founder of Excelsus Structural Solutions
(photo: CH Media/Alex Spichale)

How much time passed between having the idea for your start-up and your launch?

Leaving aside the general ideas already conceived during the beamline scientist years, it took me approximately four months between consolidating the business idea and sitting at a notary's office. ▶

Who helped you getting started? For example friends and family, incubators, investors or mentors?

There have been several people who supported the founding of Excelsus Structural Solutions. Once a company is success-

Company Facts

Excelsus Structural Solutions, registered in 2012

Number of employees (2021): 6

Business area:

- Analytical Services: High resolution measurements, quantitative phase analysis, trace analysis
- R&D projects with tailored measurement techniques and methods of analysis
- Advanced consulting services: Support to intellectual property rights protection, development of customised analytical methods & competencies

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fully founded, we tend to forget that the difficult initial step is convincing yourself - and investors, if needed - that your idea makes sense and is feasible. At this early stage, support and encouragement is very important. The first person supporting Excelsus Structural Solutions has been Arturo Araque, bio-chemical engineer and founder of Excelsus Scientific Engineering, a company that offers expert consultancy to biopharmaceutical companies. Arturo introduced and guided me through the concepts of validation and Standard Operating Procedures. He made me aware of the importance of offering our synchrotron XRPD services in respect of these concepts. The name "Excelsus" was adopted to underline the link between our companies.

What was your biggest problem in the start-up process? And what was your biggest mistake, or was there an obstacle that you did not expect before?

Scientists of my generation, have no basic training or knowledge to found a business out of scientific technology or know-how. I was glad to hear that the Swiss Federal Institute of Technology (EPFL/ETH) offers such course to students. I could have saved precious time at the beginning if I have had such a basic business knowledge. For every single step, I had to gather information and help: what kind of company, a business plan, legal support, accounting support, website, marketing in addition to the definition of the core scientific business. I do not remember a big mistake, besides the choice of the first accountants, which now is fortunately over.

What kind of structures would have helped you to cope better?

I believe that for spin off technological companies it is valuable to join an Innovation Scientific Park for access to services outside the scientific expertise, for example legal expertise, accounting services or marketing. However, at the beginning budgets are terribly tight especially if you decide not to have investors, as I did. If such services are expensive, you simply **CAROTS (Commercial Analytical Research Organisations Transnational Strategy) is an international project that aims to establish a new type of private or public-private company in the Baltic Sea Region: Commercial Analytical Research Organisations (CAROs). CAROs, as intermediary bodies between industry and academia, provide enterprises with much quicker yet complete assistance in analytical research in areas like New Materials, NanoTech or Life Sciences. The project is led by DESY, Deutsches Elektronen-Synchrotron, in dialogue with ten project partners and twelve associated organisations from across the Baltic Sea Region.**

For further information visit
www.carots.eu

cannot afford them.

What has been your most interesting company case so far?

We have several very interesting cases in our records. One of the very first projects we developed with Dr. Arnaud Grandeury (*Novartis Pharma*) with whom we have a long list of successful collaborations. Deviations in dissolution rates of a controlled released drug product had been observed at Novartis, which were attributed to the formation of a known hydrated form based on the crystallites morphology detected in scanning electron microscopy measurements. Laboratory x-ray powder diffraction could not detect any contamination of that drug. Remedies to prevent the formation of hydrated forms were unsuccessful to overcome the deviations observed. Synchrotron XRPD could directly detect the unexpected formation of an anhydrous form at trace level and our quantification correlated perfectly with dissolution rate measurements, consolidating our results. With Excelsus' input, the problem could be directly addressed and solved in a matter of days.

What is your biggest challenge at the moment, personally in your role and for the company?

I have two big challenges: First, to decide how Excelsus Structural Solutions should evolve; and secondly, to identify in each of my collaborators strengths and weaknesses and guide them to value the first and cope with the second.

What would help you most right now to reduce costs, increase your visibility and to co-operate with other intermediaries?

I am strengthening my team's competences with consultancy by expert scientists working for Excelsus as external contractors. This is a cost effective approach. At the moment it is limited to a network of scientists whose value I guarantee in person, but I do not exclude that this concept could be eventually extended to a larger network, if we can identify convincing selection criteria. Excelsus always guarantees for the quality of data and analyses delivered. It could also be eventually extended to collaboration with other intermediary service companies.

What is your number one advice for a new founder of an intermediary?

A minimum of compromises and endless tenacity. ■



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