

Entrepreneurial ID «venture leaders» 2009



Name: Samuel Halim
Contact: sam@nanograde.net, +41 44 633 62 39
Project/ Company name: *nanograde Llc.*
Short description: *Customized nanoparticles and solutions*
Web site: www.nanograde.net
Industry: *nanotechnology, additives*

The venture leader

Being born and brought up in Switzerland with a Chinese-Indonesian background I have always been attracted to different cultures. So after finishing my MSc in Materials Science & Engineering in 2004 I did not only have an ETH diploma in my pocket, but by then I had also spent almost one year in China (Beijing and Shenzhen), one year in Lausanne (EPFL) and half a year in Stockholm. And as the key to every culture is its language and food, I speak six different languages and I have to do a lot of sports to avoid gaining weight... Climax of my athletic "career" was crossing the finish line of the Half-Ironman in Rapperswil after five hours of swimming, cycling and running. The gastronomic climax, I am still working on...

During my PhD in Chemical Engineering I worked a lot with a technology that allows the synthesis of nanoparticles with any desired composition. I was sure that being able to choose a nanoparticle composition like candies in a candy store must be a dream for every engineer! The great product innovation potential by incorporation specific nanoparticles into existing products completed the high commercialization potential of this technology. After I had witnessed the rise and fall of the first spin-off company trying to commercialize the technology, I was sure there must be a different, more successful approach! nanograde Llc. is the result of this belief and together with my partner Norman Luechinger we offer the customized synthesis of nanoparticles and the prototype development of nanoparticles solutions.

The Company / project

Status : Nanograde Llc. founded in July 2008

Product / service: Production of customized nanoparticles and trading of such. Problem solving, prototype and product development by the use of nanoparticles

Target customers: National and international companies, mainly – but not limited to – customers from following industries: food and pharma packaging, dentistry, medical, coating, textile.

Financing: 100% self financed

Growth objectives:

In 5 years: 15-20 employees, 15-20 Mio. CHF revenues / year, annual production volume on the multi-ton scale, 20-25 product development contracts.

USP: Our technology is the only technology that allows the precise adjustment of very specific properties in form of nanoparticles with the same production setup at large scale, e.g. hygenene, physical (scratch resistancy, adsorption (proteins, viruses...), solubility, reactivity), optical (UV absorption, refraction index...), shielding (electromagnetic...). We can react quickly and precisely to our customer's needs. And we believe we are the only company that offers tuning of nanoparticles to a specific application. We have strong upscaling knowhow and with our pilot-scale reactor we have already a capacity of 1 kg of nanoparticles per day. Last, but not least, our firm product oriented application knowhow should help bridging the gap from the nanoparticles synthesis to the end product.

