



The Institute of Life Technologies provides a wide range of services and consultancy.

diagnostic systems research group combines theory with practice in immune diagnostics, molecular and cellular diagnostics, instrumental analytics and bio-sensor development, as well as compound and phyto extract activity screening. The scientists work closely with their colleagues at the Institute of Systems Engineering to focus on point-of-care diagnosis at home, at the doctor's office or in pharmacies for immediate test results.

A one-stop contact point

All four research groups make use of the expertise and modern infrastructure of the analytical platform which encompasses chemical, molecular, biological and micro-biological analysis. The laboratories are accredited in accordance with ISO 17025, while microbiology additionally has Swissmedic accreditation.

As to education and training, the Institute of Life Technologies offers a practice-oriented bachelor's course with consolidation in food technology, biotechnology and analytical chemistry. Within the master of sciences HES-SO in life sciences, a specialisation in applied biosciences helps students to pave the way to a cleaner future with sustainable biotechnology, develop analytical tools for the diagnostic industry and discover how to manufacture drugs, acquire knowledge in the field of genome analysis and discuss cases of quality management and regulatory affairs.

The Institute of Life Technologies is the one-stop contact point for industrial companies. The team is experienced in publicly-funded projects or projects for industrial clients and can open up access to state support such as the CTI, the Commission for Technology and Innovation.

The Institute of Life Technologies is the partner of choice for companies, especially SMEs looking to achieve major success with future-oriented innovations and secure a strong foothold in the market.

* DR SERGIO SCHMID Head of Institute of Life Technologies

PARTNERSHIP FOR SUCCESS AT THE ITV

BY DR SERGIO SCHMID* THE INSTITUTE OF LIFE TECHNOLOGIES (ITV) AT HES-SO VALAIS/WALLIS PROVIDES A WIDE RANGE OF SERVICES AND CONSULTANCY THAT FULFILL THE HIGHEST QUALITY REQUIREMENTS.

At the Institute of Life Technologies at HES-SO Valais/Wallis, clever minds are at work developing genuine innovations to meet the individual requirements of their demanding customers from the pharmaceuticals, biotechnology, medical diagnostics, agri-food, cosmetics and chemistry sectors. Some 78 competent collaborators including 18 professors with industry experience are working as an interdisciplinary team in applied research and development, creating added value of CHF 4.6 million (2015) a year. The four research axes are clearly focused and designed to pool existing expertise and generate synergies.

As a unique example of its kind, the **peptide and protein technologies (P2T)** programme focuses on the discovery and optimisation of peptides and proteins for therapeutic, diagnostic and food applications. The industrial partners benefit from the development, characterisation and production of peptides and proteins,

while the experts are active in virology, peptide synthesis, peptide transporters, peptide conjugates, assay development, recombinant technologies and bio-analytics.

Researchers working in **biotechnology and sustainable chemistry** dedicate themselves to biotechnological and chemical innovation to address current challenges and work out sustainable solutions for social, industrial and academic needs. Priority is given to bioprocess engineering, biomaterials, bio resources, (bio)analytics, biocatalysis, sustainable energy and chemistry.

The specific demands of the economy and society determine the programme of the **food and natural products** research group. The remit involves a broad spectrum of expertise in food microbiology and food safety across the entire food chain, bioactive compounds and health as well as processing of food and natural products.

In order to create more added value, the