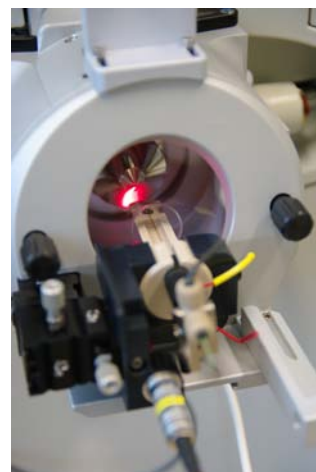


PROTEIN STRUCTURES AS NEW RESEARCH DOMAIN

VITO AND THE UNIVERSITY OF ANTWERP LAUNCH RESEARCH CENTRE FOR PROTEOME STUDIES

VITO, together with the University of Antwerp, is further developing a booming research domain in systems biology. Proteomics is the field that focuses on analysing all proteins and their interactions in a cell. This research can contribute among others to new medical therapies, since defects in and between proteins often play an important role in diseases.



Enormous step

Proteomics is the collective term for research into the proteome, the cocktail of proteins in an organism responsible for many cell processes. Study of the proteome is relatively new and extremely complex. Proteome research studies the nature and quantity of proteins present in a cell, the changes they undergo and the interactions taking place between proteins. The aim of this research is to better understand life at the molecular level, and ultimately to enable a quicker diagnose of diseases and to create more refined medicines. Proteome research could signify an enormous step forward for diverse sectors in society, not in the least in medicine.

Investing together

Rik Ampe, director at VITO: “The development of new technologies and improvements to existing technologies – mass spectrometry, the selective marking of proteins, micro-arrays ... – have given momentum in recent years to the study of proteins. At VITO, we strongly believe in the overwhelming importance this research domain soon could get, and we wish to invest in it now. Investing together certainly has its advantages. The University of Antwerp is the ideal partner to bundle forces with in the area of protein research in a Flemish Centre for Proteome Analysis (Ceproma).”

Likewise, the University of Antwerp also sees VITO as a preferred partner in realising its plans related to proteome research. **Jean-Pierre Timmermans**, chair of the University of Antwerp's research board: “Our University is worldwide renown in the study of the genome. We wish to use this top expertise to expand into related research areas such as proteomics. The partnership between the University of Antwerp and VITO is not new: a number of VITO scientists are part-time professors in our educational programmes. We see VITO as a preferential partner due to the many areas of overlapping interest and a series of successful partner projects in recent years. In the domain of proteomics, the ecotoxicological expertise of VITO (which complements that of the University of Antwerp) and its experience with biomarkers and *in vitro* test systems, constitute a strong foundation for innovative and promising research. Moreover, this expertise is the perfect supplement to our more fundamental biological approach.”

Strong brand

“In 2006, Ceproma was selected as one of the six core facilities of the University of Antwerp. The focus lies on the performance of the centre. The aim is for the Ceproma protein researchers to use the latest technologies

and unique state-of-the-art equipment. The tone has been set by bringing in among others Prof. Dr. Frank Sobott, a worldwide expert in mass spectrometry and characterisation of biomolecular structures.”

“In the coming years, we first of all wish to make Ceproma a strong brand. In addition to acquiring new insights, we intend to develop and apply new technologies to map the proteome and the underlying proteins. The centre’s protein research will gradually get inspired by questions addressed by the medical world, the health sector, the food industry, plant genetics ... Thus, soon an interesting cross-fertilisation can take place between research and industry,” concludes Rik Ampe.

