

# High value functional proteins recovered

Upfront Chromatography, a leader in customised industrial scale separation services, has announced that commercial production of highly functional proteins from the side-stream of potato processing is now possible using its Rhobust processing platform. The Rhobust adsorbent is a key component of ingredients company Solanic's industrial processing plant, which was officially opened in December last year in The Netherlands.

The functional proteins isolated using this process have a wide range of functionalities comparable to high grade proteins.

One of the fractions recovered by Solanic exhibits satiety-enhancing benefits. This type of ingredient is increasingly

being sought by food manufacturers to help address the obesity problem in Europe.

The installation at the Solanic plant employs Upfront's proprietary mixed mode ligand chemistry to enable isolation of functional proteins without using traditional heat coagulation methods.

"The Rhobust platform offers companies significant new revenue opportunities in the protein food ingredients industry," commented Allan Lihme, technical director of Upfront Chromatography. "Our technology has already been proven to be suitable across a wide range of industries and we are currently looking at numerous applications in crop processing such as wheat, pea, corn, oats and other cereals."



*High value proteins can be recovered from low volume side-stream materials using Rhobust*

The technology is based on Second Generation Expanded Bed Adsorption (EBA) and enables the recovery of high value functional proteins from low value, high volume raw materials and process side-streams. The columns are operated at atmospheric pressure and are capable of processing liquid streams at very high flow rates without the need for prior clean-up and high pressure pumps.

Selection of proprietary mixed mode ligands allows the capture and release of target molecules by simple changes of pH, which can be readily implemented in large scale production facilities and maintain the biological activity of the product.

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