



VIPP VALUES CREATED IN
FIBRE-BASED PROCESSES
AND PRODUCTS

VIPP INDUSTRIAL GRADUATE SCHOOL

A PARTNERSHIP OF 14 COMPANIES IN THE PAPER AND
PULP INDUSTRY AND KARLSTAD UNIVERSITY

VIPP stands for values created in fibre-based processes
and products and is a unique partnership in Swedish higher
education.

This is a long-term project financed by the Knowledge
Foundation and the partner companies.

The partnership was launched in 2011 and presently 18
doctoral students are busy with as many research projects.

Three strong industrial graduate school environments:

- pulp, paper and graphic technology
- environment and energy
- service innovation and customer satisfaction

Here the disciplines of chemistry, chemical engineering,
environmental and energy systems, physics, mechanical and
materials engineering and the Service Research Center (CTF)
at Karlstad University are collaborating

The doctoral students share their time between Karlstad
University and their respective company. Their academic
supervisors and industrial mentors participate actively
throughout the whole process.

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Research is a joint production process in which the university and industry consider the needs of both partners in the initial planning.

Research has a focus on innovative products and services of the future.

”We need skilled and professional researchers in academia and industry, researchers with the ability to cooperate, who have deep expertise combined with a broad vision. I am convinced that the VIPP doctoral students will be able to meet these needs in the areas of technology, service innovation and sustainable development.”

Louise Törnefalk Svanqvist, chair of the VIPP board

WE ARE PARTNERS IN VIPP INDUSTRIAL GRADUATE SCHOOL

Asko Appliances, Akzo Nobel Pulp and Performance Chemicals, BillerudKorsnäs, BTG Instruments, Domsjö Fabriker/MoRe Research, Härjeåns Energi, Innventia, Kemira, Pöyry Sweden, SP Sveriges Tekniska Forskningsinstitut, SSG Standard Solutions Group, StoraEnso Group R&D, Stora Enso Skoghall, Valmet.

PROJEKT

- **A new sensor for improved fibreline control**
Caroline Wilke, BTG Instruments
- **Efficient drying of tissue paper**
Anders Ottosson, Valmet
- **Investigation of the non-uniformity during dewatering and drying of tissue paper grades**
Aron Tysén, Innventia
- **Predicting flexographic print quality from substrate properties with special focus on liquid packaging boards**
Sofia Thorman, Innventia
- **Food-packaging barrier from renewable resources**
Åsa Nyflött, Stora Enso Group R&D
- **Fresh fruit and vegetable waste in the food supply chain – quantification and causes**
Lisa Mattsson, BillerudKorsnäs

- **Systems analysis of biorefineries**
Christer Gustavsson, Pöyry Sweden
- **Energy efficient wastewater-treatment in pulp-and papermills through pre-treatment using separation**
Mattias From-Aldaron, Stora Enso Skoghall
- **Reduction of the energy use in a tumble dryer with heat –pump technology**
Peder Bengtsson, Asko Appliances
- **Maximised product value from lignocellulosic raw material through next generation of sulphite pulping**
Raghu Deshpande, Domsjö Fabriker/MoRe Research
- **Renewable packaging material**
Muhammad Asif Javed, Karlstad University
- **Service innovations in industrial networks**
Per Myhrén, SSG Standard Solutions Group
- **Design and utilization of a high speed creping simulator for tissue**
Pyyri Hämäläinen, Kemira
- **Oxidative pre-treatments with the intention to facilitate the microfibril separation and lower the energy demand**
Pia Hellström, Akzo Nobel Pulp and Performance Chemicals
- **Increased availability and reduced energy consumption of the dryer at wood pellet production**
Helena Johansson Cider, Härjeåns Energi
- **Systems analysis of Multi-product pulp mills**
Jonas Kihlman, Pöyry Sweden
- **Energy efficiency at production mills**
Daniel Ekbåge, Stora Enso Group R&D
- **Interpreting the customer's value experience**
- **The starting point for service innovation**
David Joelsson, SP Sveriges Tekniska Forskningsinstitut

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