



Participating organisation

Finland



VTT Technical Research Centre of Finland

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Organisation's details

Finland



VTT Technical Research Centre of Finland

Services/Products:	Research organisation, provides a wide range of technology and applied research services for its clients, private companies, institutions and the public sector.
Total number of employees:	2800
Employees in E48 related areas:	Pulp and paper ~ 220
Number of students:	A number of thesis workers every year
Research focus:	<ul style="list-style-type: none">• Six research institutes• Processes, Biotechnology, Industrial Systems, Electronics, Information Technology, Building and Transport
Ownership structure:	Government, turnover 220M€ (Funding: government 31%, public sector 25%, abroad 11%, private sector 33%)



E48 representative's presentation (I)

Finland



Juha Saari
Research Scientist

VTT Processes

Biologinkuja 7, Espoo

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Academic background:

M.Sc. Åbo Akademi University

Paper Chemistry Laboratory

Areas of expertise:

De-inking

Printing

Paper coating



Function in COST E48:

Member of the MC

Member of the WG2



E48 representative's presentation (II)

Finland



Juha Saari

Most relevant publications in the field of E48:

Juha Saari

New Process Engineering for Deinking

8th Pira International Conference Prague 2004, Paper Technology Volume 46, numbers 1 and 2 (March and February 2005).

Saari, Juha; Virtanen, Jouko; Pirttinen, Esa; Stenius, Per

The effects of inks on deinking

International Symposium - Recovery and Recycling of Paper. Dundee, Scotland, March 2001.



Own expectations in E48

Finland



- **Research network**
- **Trends/the future in paper recycling**
- **Overview of the research activities in Europe**
- **Project proposal exceeding conservative boundaries**
- **Workshop/seminar/conference**



Own contributions to E48

Finland



Finished or current projects in the area of E48:

- Project 1: New Process Engineering for Deinking
- Project 2 : The Effects of Ink on Deinking

Projects submitted or planned during the duration of E48

- New Process Engineering
- Co-Operation plan

Specific tools

- Research facilities
- Software: Balas Process Simulation, ChemSheet





Brief description of own finished or ongoing research projects in the area

Finland



Project 1: New Process Engineering for Deinking

- *Deinking plants are burdened by the changing nature of their raw material*
- *To develop new solutions for removing the inks from recycled pulp considering the requirements of the changing raw material*
- *Ultrasound, magnetic separation and enzymes*
- *Potential of new processes*

Project 2: The Effects of Ink on Deinking

- *Development of new, more deinkable printing inks*
- *A better understanding of the effects of printing ink formulation, deinking chemicals, ageing and deinking process on detachment and fragmentation of printing inks*
- *Laboratory and pilot scale trials*
- *Modified vegetable based inks have deinking friendly characteristics*



Organisation of E48 events

Finland



My organisation has the personal and logistic facilities to organise major E48 events and would particularly be prepared to host (please tick box)

specific (seperate) MC or WG meetings

parallel or consecutive meetings of both MC and WGs

a workshop (up to 50 participants)

an international conference (more than 50 participants)



External contributions to E48

Finland



I believe that the following external organisations or experts could make valuable contributions to E48 events:

Name	Organisation	Expertise
Kyösti Pöyry Heikki Melajärvi	Paperinkeräys Oy.	Recovered paper producer and merchant
Jyrki Leppäaho Jonna Haapamäki- Syrjälä	MetsäTissue Corp.	Tissue Mill



Expectations and offers concerning STSMs Finland



My organisation is prepared to host young academics from foreign organisations in the frame of STSMs. We could offer colaboration in

- **New deinking technologies**
- **Life cycle analysis**
- **Open for suggestions**

My organisation is interested in sending young academics to foreign research organisations in the frame of STSMs.

We would particularly be interested in learning more about

- **New deinking technologies**
- **Life cycle analysis**
- **Open for suggestions**