



Participating organisation

Germany



Papiertechnische Stiftung - PTS

Hess-Straße 134

D-80797 München

Papiertechnische Stiftung - PTS

Hess-Straße 134

D-80797 Munich

info@ptspaper.de



Organisation's details

Germany



Papiertechnische Stiftung-PTS

Services/Products:

Research, Consultancy, Measuring and testing services, Advanced Training, Continuing education

Total number of employees:

150

Employees in E48 related areas:

20

Research focus:

- **Recovered paper quality**
 - **Assessment of recycled fibre quality**
 - **Recycled fibre upgrading**
 - **Removal of disturbing substances**
- Private, independent**

Ownership structure:



E48 representative's presentation (I)

Germany



Strunz, Alf
Dr.-Ing.

Function in COST E48:
Member of MC, Member of WG 1

Papiertechnische Stiftung
Fibre Technology
Pirnaer Str. 37
D-01809 Heidenau
a.-m.strunz@ptspaper.de



Academic background:

1974 – 1978 Study of Paper Technology, Technical University of Dresden
1979 – 1992 Scientific assistant of Prof. Blechschmidt, TU Dresden
1986 Doctoral thesis (Coating of optical inhomogeneous surfaces)
1992 Move to PTS, Department of Fibre Technology

Expertise:

- **Quality assessment of recovered paper / recycled fibres for packaging materials**
- **Stock preparation, especially refining**
- **Economics of recovered paper utilization**



E48 representative's presentation (II)

Germany



Strunz, Alf

Most relevant publications in the field of E48 (max. 5) :

Blechsmidt J., Strunz A. u. A. Knittel

**Improvement of deinkability of wood containing offset printing paper by surface treatment
EUCEPA Konferenz 1992, Budapest**

Blechsmidt J., Strunz A. u. A. Knittel

**Degree of Ink Removal by Deinking of different Printing Papers
Progress in Paper Recycling, 1992, August**

Blechsmidt J., Strunz A.

**Properties and utilization of liquid packagings
Das Papier 47, 650 – 659 (1993) Nr. 11**

Fiedler, M., Seidemann, C., Strunz, A.

**Using an extraction method to estimate the coating binder distribution in deinking plants
PTS-CTP Deinking Symposium, Munich 2002**

Strunz, A.

**Development of recovered paper grades mainly used for production of packaging materials
IPE-CTP-PTS Recycling Symposium, Barcelona 2005**



Own expectations in E48

Germany



- To get information concerning recovered paper quality in other European countries and the methods used for quality assessment
- To develop common strategies for monitoring recovered paper quality of major grades typically used for case material
- Development of models for the simulation of recycled fibre quality in the material circuits of case materials (corrugated)
- To compile information about the development and implementation of automatic or semi-automatic sorting technologies for recovered paper in international scale and the influence of such techniques on recovered paper quality
- To use STMS for dissimulation of NIR-based recovered paper quality control method and its validation by parallel measurements based on core drilling (SAICA, SCA)



Own contributions to E48

Germany



Finished or current projects in the area of E48:

- Project 1: Entry inspection of baled recovered paper based on NIR
- Project 2 : Technological properties of recovered paper grades typically used for the production of case materials
- Project 3 : Limits and possibilities in refining of recycled fibres

Projects submitted or planned during the duration of E48

- Reinforcement fibres in recycled fibre stocks for case materials
- Cleaning of recycled fibre stocks for case materials by flotation

Specific tools (equipment/software) relevant for E48 objectives

- NIR-based Sensor for quality control of baled recovered paper grades



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

Germany



Project 1:

Entry inspection of baled recovered paper based on NIR

- *Excess in unusable materials in recovered paper*
- *Reduction of extra costs caused by quality deviations of recovered paper*
- *NIR-based sensor for determination of moisture, unusable materials*
- *Fast method to determine moisture, unusable material, fibre composition*

Project 2:

Optimizing costs and properties of corrugated base papers

- *Tight limitations for optimization of costs and properties of case materials*
- *Development of mathematical optimization tools using fibre properties*
- *Data base gained from pilot plant trials and industrial process analysis*
- *EXCEL-based optimization tool*



Organisation of E48 events

Germany



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

Germany



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

Name	Organisation	Expertise
G. Valles	SAICA / Spain	Recovered Paper Quality / Control of ...
J. Bruzelius	IL Retur / Sweden	Paper Collection / Sorting / Quality Control
C. Dommermuth	FES Frankfurt , Germany	Automatic sorting of recovered paper
D. Borschke	CELPAP GmbH, Germany	Optimum processing of recovered paper



Expectations and offers concerning STSMs^{Germany}



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

- **Assessment of recyclability of paper products**
- **Pilot plant facilities for processing of recovered paper**
- **Determination of stickies in recycled fibre stocks**

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

- **Quality control of recovered paper**
- **Application of NIR for testing of fibres and paper products**