

2005 – Tom Kjelgaard, Katarina Magnusson and Ulf Ringdahl, Sweden

Description

The Marcus Wallenberg Prize for 2005 is awarded to Mr. Tom Kjelgaard, Ms. Katarina Magnusson and Mr. Ulf Ringdahl for their path breaking research leading to a retortable paperboard packaging material for foodstuff.

Specifically, they developed a packaging material structure that is sufficiently flexible during forming and filling to avoid cracking of the critical barrier layer; it retains print quality and maintains an effective gas and vapour barrier throughout the retorting process.

This development enables the production of a package that is both appealing in appearance and protective of the food inside over a very long period of time. In contrast to metal cans and glass jars, the new package ships flat and, after filling, packs without wasted space. The package is easily opened via a tear strip and, once emptied, can be easily flattened for disposal or recycling. This invention opens a new and rapidly expanding market for paperboard while displacing packaging that is less environmentally and economically efficient.

Mr. Tom Kjelgaard, Mechanical engineer, has worked since 1968 at Tetra Pak in different departments and positions, mainly in the areas of converting quality control, material development and package development. He has worked with Tetra Recart since it started in autumn 1983.

Ms. Katarina Magnusson, MSc Chemical Engineering, joined Tetra Pak in Lund 1983 as a development engineer, working with package and packaging material development. She currently works at Tetra Pak Research and Development in Lund.

Mr. Ulf Ringdahl, Mechanical engineer, started working at Tetra Pak Development in Lund in 1978. 1982 he started up the development department in Modena, Italy. In 1989 he became the system manager for the Tetra Rex packaging system. During 1993-1996 he was project leader for the new packaging system "Tetra Recart". He is now part owner of Trepak International.