

Press Release

CLRI receives CSIR Technology Award for Innovation 2011

The Central Leather Research Institute (CLRI) has received CSIR (Council of Scientific and Industrial Research) Technology award for Innovation – 2011 for development of salt free tanning technology. This technology eliminates the usage of salt in the tanning process, and shortens it by avoiding the steps of pickling and then again basification to make the medium neutral. Thus, the process eliminates the formation of brackish water during the tanning of hides and skins. It ensures uniform distribution of chromium throughout the hide or skin and high quality leather, which has gained user acceptance. Customarily, prior to the actual process of chrome tanning, which is the primary method used in tanning industry, the pH of hides and skins is lowered to about 2.5 – 3.0 by use of acid through a process known as 'pickling'. Lowering of pH helps in the facile penetration of the mineral tanning agent into the substance. Salt is added to negate the effect of swelling of animal tissues caused by acid addition, which would otherwise make the leather physically unstable. While addition of the salt in the above process helps in retaining the strength and quality of leather, it leads to high amount of TDS (Total Dissolved Solids) and chlorides with respect to pollution standards in the effluents during treatment at a later stage.

Even after a huge financial investment to treat effluent systems, the present tanning industry has been struggling on for years to meet the proper regulatory standards of TDS in effluent systems. This technology provides an enabling solution to address the issue of TDS through a change for a century old process.

CLRI team comprising Mr. V. John Sundar and Mr. T.Rangasamy under the leadership of Dr.C.Muralidharan and guidance of Dr.A.B.Mandal developed and implemented this technology in select tanneries in Tamilnadu.

CSIR has recognised CLRI team for the breakthrough technology by honouring with this prestigious award. The award was presented by Shri Vilasrao Deshmukh, Honourable Minister for Science & Technology and Earth Sciences in the presence of Shri Ashwani Kumar, Honourable Minister of state for Science & Technology and Planning on 26.09.2011 during CSIR Foundation Day function held at New Delhi.

