

## Smart Warehouses with Application of Frontier EM & Electronics Based Technology (S.A.F.E<sup>2</sup>.T.Y.)

<i>Salient features</i>	<ul style="list-style-type: none"> <li>➤ A warehouse management (WMS) system for the paddy storage</li> <li>➤ Microwave based portable moisture meter has the accuracy of <math>\pm 0.50</math> M.C and repeatability of <math>\pm 0.80</math>. Online moisture meter has the accuracy of <math>\pm 0.75</math> M.C and repeatability of <math>\pm 0.30</math>.</li> <li>➤ ANNADARPAN is the E-Vision system for quality characterization of rice. The separate software for raw and parboiled rice. It is having accuracy of <math>\pm 0.004</math> and repeatability of <math>\pm 0.003</math></li> <li>➤ RF disinfection system has the potential to attain 100% mortality of <i>T.castaneum</i> where grain temperature is attained in the range of 60-63°C @ 500 W power in 3 minutes of exposure time.</li> <li>➤ FUMON is the phosphine monitoring sensor during fumigation of stacks in warehouses. It is portable &amp; user friendly system with a sensing range of 0 - 3000 ppm</li> </ul>
<i>Advantages</i>	<ul style="list-style-type: none"> <li>✓ Smart warehouse management system for continuous monitoring of temperature and RH in the warehouses along with maintaining database for individual gunny bags stored in the warehouse.</li> </ul>
<i>Process Technology / Product developed by</i>	<div style="display: flex; justify-content: space-around;">   </div>
<i>Year</i>	2018-21
<i>Source of funding</i>	MoFPI
<i>More information</i>	<p><b>Status of commercialization / Patent / Publication</b></p> <p>NA</p>