



**Lajos PÁL**

Technical Support and Service Engineer  
COMPONENT Ltd

Pal.Lajos@Componentkft.hu

## **Brand new way of interface level detection with proven TDR measurement**

Most of the interface applications can be easily measured with floating, buoyancy or guided radar technology but there is a minority where the application generates challenging conditions for these measurements.

The thick emulsion layers, the multi layers and these behaviors require compromise or special solutions.

For example the level measurements in upstream separator, quench water settlers, desalters or electrostatic coalescers are such applications.

With this patented revolutionary method of continuous measurement the presented instrument can measure not only the upper level or the next characteristic phase level, but the thickness of the emulsion layer and moreover the vapor above the level and the possible solid particles on the bottom or other phases. The new way of measurement called multiphase measurement.

We are introducing how this patented method of measurement is utilizing the proven TDR technology resulting a reliable, easy to install, low maintenance multiphase level measurement.

Lajos Pál is having experience on industrial field instrumentation, isolation valves and control valves for 15 years by performing the their sizing, selection, commission and field service.

He was held several presentations and trainings where the main focus was always to making the technical background and principles explained that the audience can easily acquire in practice.

Hotel Palota \*\*\*\*\*  
Miskolc-Lillafüred  
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Process Control  
Systems Meeting

PCS



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A new TDR Multiphase Detector, aptly named Genesis<sup>®</sup>, was invented to dynamically measure thick emulsions and sediment levels. The measurement is accomplished by sending high frequency EM energy in the probe to detect upper level and various other levels/mixture dynamic layers that may be present. The unique (and patented) usage of guided wave radar measurements (that will be made known in the presentation), along with sophisticated software algorithms, make it possible to measure total level, top of emulsion, bottom of emulsion and sediment through a single opening in the vessel.

