





AI enabled non-radioactive multiphase flow meter based on microwave DMOR Technology:

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Content

Existing MPFM Tech	 <p>Radioactive absorption</p> <p>Gas has much lower density which is easily contrasted from liquids (oil & water) so gamma ray absorption is dominant tech. for GVF measurements – with much lower dependency on WLR.</p>	 <p>Infrared absorption</p> <p>Water has very distinctive IR absorption characteristic as compared to hydrocarbons (oil & gas) making it ideal choice for WLR measurements, almost independent of GVF and salinity.</p>	 <p>Cross correlation of two signals</p> <p>This method is used as an alternate of gamma ray source to measure the GVF by looking at repetitive patterns in the fluid flow.</p>
	 <p>HSE safety concerns</p>	<p>Intrusive sensing & large OPEX</p>	<p>Flow regime dependent & calibration intensive</p>
This work	<p>Safe microwave signals</p>	<p>Non-intrusive DMOR tech.</p>	<p>AI digital twin model for minimized calibration</p>

Distinctive feature of this work

We are disclosing world's first AI enabled MPFM based on non-intrusive and non-radioactive microwave DMOR technology. Our proprietary digital twin model revolutionizes the inverse measurement which otherwise is a tedious task esp. in absence of signal cross correlation.



Interested to know more

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