

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

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Content

Existing MPFM Tech



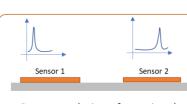
 $Radio active \, absorption \,$

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.



Infrared absorption

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.



Cross correlation of two signals

This method is used as an alternate of gamma ray source to measure the GVF by looking at repetitive patterns in the fluid flow.



HSE safety concerns

Intrusive sensing & large OPEX

Flow regime dependent & calibration intensive

This work

Safe microwave signals

Non-intrusive DMOR tech.

Al digital twin model for minimized calibration

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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