# Mohammed Rivin S Flow Assurance consultant



### **Summary**

### **Years of Experience**

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#### **Office of Employment**

Wood PLC, Chennai

#### **Industries**

- Oil and Gas
- Upstream

#### **Types of Facilities**

- Production Facilities
- Onshore/Offshore Pipelines
- Upstream Systems

#### **Areas of Expertise**

- Flow Assurance
- Multiphase Flow
- Process Modelling and simulations
- Surge studies
- Pandas/scikitlearn/tensorflow/keras

# **Professional Summary**

Early career Flow assurance & Process consultant with interests in data driven modelling and experience in simulations using OLGA, SPS. Graduated with an Undergraduate degree in Chemical Engineering.

I love solving problems and thrive in challenges, technical and otherwise. I have been involved in performing steady state and transient simulations of oil & gas pipelines and injection networks; such as normal operations, pump trip, pump restart, sudden valve closure, shutdown, restart, pigging and pressure surge analysis.

## **Qualifications**

#### **Education**

**B. Tech** in Chemical Engineering, National Institute of Technology(NIT) Calicut, India, 2018-22

#### **Software / Skills**

- OLGA base
- Python, C++, MATLAB
- Synergi Pipeline Simulator [SPS]
- PVTSim
- PIPESIM
- Artificial Neural Networks

#### Languages

- English
- Hindi
- Malayalam

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# **Experience**

#### Flow Assurance Consultant (Wood PLC, India)

#### Saudi Aramco; L&T, Manifa water Injection Facilities (FEED), Saudi Arabia

- Performed steady state simulations for Manifa Water Injection Network to estimate the line size adequacy for existing network and recommend line sizes for the new pipeline network.
- Various options analyzed based on the water injection rates over the years using **SPS.**

# Saudi Aramco; Mcdermott, Marjan Package 4 Rich Gas, Lean Gas and MEG System Flow Assurance Study, Saudi Arabia

Ongoing project. Responsible for lean gas system studies in scope.

- Lean gas system studies that include steady state hydraulics, line packing, depressurization, pigging and initial start-up were carried out using **OLGA** and **PVTSim**.
- Validated the line sizes presented in FEED study and estimated the pressure drop across the choke valves. Developed the operating guidelines for steady state operations in order to ensure safe operations.

# **Professional History**

Wood (June, 2022 – Present)