

## PERMANENT ADDRESS

S/O Tikam Singh  
H.No:-1, Vill-Kakrala,  
Post-Chandpur  
District-Bijnor, UP, India  
Pin Code-246725

## VIVEK KUMAR RAJPUT (SR. PROCESS ENGINEER)

### Experince-7 Years

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## KEY SKILLS & KNOWLEDGE AREAS

- Working Knowledge of **Offshore** and **Onshore** Oil & Gas Processing Facilities.
- Design Process Packages by Simulation Software as **ASPEN HYSYS V8.8**.
- **PFD** (Process Flow Diagram) and **P&ID** (Piping and Instrumentation Diagram) Development.
- **Line Size Calculation** for Gas, Liquid and Two-Phase Lines According with **API 14E** Standard.
- **Pressure Drop Calculations** According with **API 14E** Standard.
- **Relief Valve Sizing** According with **API 520, 521** Standards.
- Equipment Sizing of **2 Phase Separator, 3 Phase Separator, Flare KO Drum, Fuel Gas Scrubber, Filter Separator** etc.
- Design of **Fuel Gas Skid Design, Glycol Dehydration Skid (TEG), Amine Unit Skid, Chemical Injection Skid, Nitrogen Generation Skid and Compressed Air Skid**.
- Separators Sizing According with **API 12J, Shell DEP 31.22.05.11-12 and Shell DEP 31.21.01.12**.
- **Fire Water Network Design** for Offshore and Onshore According **NFPA 11, 13,15,20,22**.
- Preparation of Technical Proposal for Pre Bid Engineering, Bid Engineering and Post Bid Engineering.
- Preparation & Issue of RFQ's, Evaluation of Vendor's Quotations, Clarifications, Technical Bid Analysis etc.
- Review of Vendor's Documents, Drawings, Datasheets, Specifications and Calculations.
- Ability to Lead a Team of Engineers and Interact with Clients and Vendors.

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## EXPERIENCE

**7 Years** of Work Experience as a **Process Engineer** in Front End Engineering Design (FEED), Process Engineering, Detail Engineering Services for **Oil & Gas (Offshore and Onshore)** and EPC Organization as **ONGC, IOCL, CEIL (India), HPCL (India), Petronas (Myanmar), PDO (Oman), ADCO, (Abu Dhabi), NIOC (Iran), KOC (Kuwait), Shell (USA), Chevron (USA), Technip, WorlyParsons, Mott MacDonald** etc.

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## WORKING EXPERIENCE & PROJECTS

### Oswal Engineering (Infra) Limited., Ahmedabad ECIS Group, Italy (Fully Subsidiary of Oswal)

**Assistant Manager (April 2016 - Till Date) Current**

**Project-1: Supply of Water Metering Injection Skid for ADCO, Abu Dhabi**

#### **Role**

- Preparation of Process Flow Diagrams (PFD) and Piping & Instrumentation Diagram (P&ID).
- Line Sizing Calculation for Liquid Lines.
- Pressure Drop Calculation for Skid.
- Preparation Data Sheet for Valves.
- Prepare of Line Sizing Report.
- Prepare of Line List.

## **Project-2: Early Production Facility System for ONGC, Kakinada, India**

### **Role**

- Preparation of Process Flow Diagrams (PFD) and Piping & Instrumentation Diagram (P&ID).
- Two Phase Separator Design.
- Coalescer Filter Design.
- Line Sizing Calculation for Two Phase line, Gas and Liquid Lines.
- Preparation Data Sheet for 2 Phase Separator and Coalescer Filter.
- Prepare of Line Sizing Report.
- PSV Design for Fire Case.
- Prepare of Line List.

## **Project-3: Supply of Corrosion Inhibitor Injection Skid for HPCL, India**

### **Role**

- Preparation of Process Flow Diagrams (PFD) and Piping & Instrumentation Diagram (P&ID).
- Line Sizing Calculation for Gas and Liquid Lines.
- Preparation Data Sheet for Pump, Storage Tank, PVRV.
- Calculation for Nitrogen Tank Blanketing According API 2000.
- N2 Calculation for Inbreathing and Outbreathing.
- Calculation for Chemical Barrel Pump.
- PSV Design for Fire Case.
- Preparation of Line List & Valve List.

## **Project-4: Miscellaneous Work**

### **Role**

- Preparation of Technical Proposal for ONGC (India), CIEL (India), IOCL (India), HPCL (India) to Pre-Bid Engineering, Bid Engineering and Post Bid Engineering as Following:-
  - Fuel Gas Conditioning Skid
  - Glycol Dehydration Skid (TEG)
  - Gas Compressor Skid
  - Gas Metering Skid
  - Amine Unit Skid
  - Nitrogen Generation Skid
  - 2 & 3 Phase Separator with Internals
- Evaluate Technical Specifications of RFQ's and Complying Technical Queries.

## **[Bellelli Engineering S.p.A, Abu Dhabi \(UAE\)](#)**

### **[Process Engineer \(May 2015 - March 2016\) 1 Year](#)**

## **Project-1: Glycol Dehydration Package (TEG) of Layang FPSO Facilities for JX Nippon Oil & Gas Exploration**

### **Ltd., Japan**

### **Role**

- Preparation of Process Flow Diagrams (PFD) and Piping & Instrumentation Diagram (P&ID).
- Line Sizing Calculation for Gas and Liquid Lines.
- Preparation of Process Data Sheets for Equipment and Instruments.
- Preparation of Process Data Sheets for Pump.
- PSV Design for Equipment.
- Preparation of Line List.
- Preparation of Valve List.

## **Project-2: Supply of Fuel Gas Package for National Iran Oil Company., Iran**

### **Role**

- Preparation of Process Flow Diagrams (PFD) and Piping & Instrumentation Diagram (P&ID).
- Line sizing Calculation for Gas and Liquid Lines.
- Preparation Data Sheet for Scrubber and Filter.
- Calculation for Depressurization for BDV by Hysys V8.8.
- N2 Purging Calculation for Fuel Gas System.
- PSV Design for Fire Case.
- Preparation of Line List.
- Preparation of Valve list.

## **Project-3: Miscellaneous Work**

### **Role**

- Preparation of Technical Proposal for **PDO (Oman), ADCO (Abu Dhabi), NIOC (Iran)** to Pre-Bid Engineering, Bid Engineering and Post Bid Engineering as Following:-
  - Fuel Gas Conditioning Skid
  - Glycol Dehydration Skid (TEG)
  - Gas Metering Skid
  - Chemical Injection Skid
  - Methanol Injection Skid
  - Corrosion Inhibitor Injection Skid
  - 2 & 3 Phase Separator with Internals
- Evaluate Technical Specifications of RFQ's and Complying Technical Queries.

## **Petro6 Engineering & Constructions Pvt Ltd., Chennai, TN**

### **Process Engineer (September 2014 - April 2015) 8 Month**

## **Project-1: Yetgun A,B,C offshore Platform Process Modification for Petronas Carigali (Hongkong) Myanmar Ltd., Myanmar**

### **Role**

- Check the Adequacy for Gas Line and Liquid line for New Flow Rate.
- Line Sizing Calculation for Gas and Liquid Lines.
- Checking the Vendor Documents for Equipment's as well as Datasheets.
- Preparation of Process Data Sheets for Equipment.
- Preparation of Instrument Process Data Sheets.
- Relief Valve Sizing and Pump Sizing.
- Preparation of Line List and Valve List.
- Preparation of Bill of Material.

## **Project-2: Satellite Field Development Project for Cairn Energy India Ltd., Rajasthan**

### **Role**

- Preparation of Process Flow Diagrams (PFD) and Piping & Instrumentation Diagram (P&ID).
- Carrying Out Design Calculations, Pump Hydraulics Calculations.
- Line Sizing Calculation for Gas, Liquid and Two-Phase Lines.
- Relief Valve Sizing and Pump Sizing.
- 3 Phase Separator, Fuel Gas Scrubber and Flare KO Drum Design.
- Preparation of Process Data Sheets for Equipment and Instruments.
- Preparation of Line List.

### **Project-3: Study of Deluge System and Hydrant System Petronas Carigali (Hongkong) Myanmar Ltd., Myanmar**

#### **Role**

- Update of P&ID and PFD.
- Design of Fire water network, Layout, Data Sheet etc.
- Calculate Fire Water Demand.
- Preparation Drawing for New Nozzle Spray System According to Equipment Protection.
- Spray Nozzle Calculation for Delude System.
- Preparation of Hazardous Area Classification.
- Analysis of Fire Water Network in Layout.
- Hydraulic Calculation by Excel Sheet.
- Line Sizing calculation by Excel Sheet.
- Working Knowledge of Various International Codes and Standards Including NFPA 11,13,15,22.

### **Asmetech Engineers Pvt. Ltd., Noida, UP**

#### **Process Engineer (September 2013 - August 2014) 1 Year**

### **Project-1: C-26 Cluster & B-173A-B Well Platform Project of ONGC, Mumbai**

#### **Role**

- Performing Pump and Line Hydraulic Calculations.
- Performing Pressure Vessel Calculations.
- Calculation of Relief Load for Equipment.
- Preparation of Material and Purchase Requisition Sheets for Equipment.
- Update PFD's, UFD's and P&ID's.
- Preparation of Process Data Sheets for and Instruments.
- Preparation of Line Lists List and Valve List.

### **Project-2: Compressed Air System Design for Hindustan Zink Ltd., Udaipur, Rajasthan**

#### **Role**

- Preparation of Process Flow Diagrams (PFD) and Piping & Instrumentation Diagram (P&ID).
- Sizing for Air Receiver Vessel.
- Preparation of Process Data Sheets for Filter.
- Finalization Compressor from Vendor.
- Preparation of BOQ and BOM.
- Preparation of Line List.

### **Greenleaf Engineering Limited, Noida, UP.**

#### **Process Engineer (Aug 2010 - Aug 2013) 3 Years**

### **Project-1: Relief Valve Sizing with Farris Engineering Services-a Division of Curttis Wright Flow Control (USA)**

- Relief Valve Sizing and Relief Load Determination for Shell Canada Sites, Caltex Australia Sites and Chevron USA Sites.

#### **Role**

- Checking the Adequacy of the Protected System Relief Requirement for Thermal Expansion, Control Valve Failure, Blocked Exit, Cooling Water, Power Failure, Fire etc. with the Given Relief Area Using iPRSM.

- Carrying Out Design Calculations, Pump hydraulics Calculations and Line Sizing.
- Performing PSV Inlet and Outlet line Hydraulic Calculations.
- Updating Isometric Drawings and System Sketches.
- Preparation of Process Data Sheets for Equipment (EPDS).
- Preparation of Instrument Process Data Sheets (IPDS).
- Preparation of System Sketch for P&ID.

### **Project-2: Oil Field Development Project-Phase 2 for Kuwait Oil Company, Kuwait**

#### **Role**

- Preparation of Process Flow Diagrams (PFD) and Piping & Instrumentation Diagram (P&ID).
- Carrying out Design Calculations, Pump hydraulics calculations and Line sizing.
- Preparation of Process Data Sheets of Pumps.
- Calculation of Relief Load for Equipment.
- Preparation of Line List.

### **Project-3: Fire Network Design for Kuwait Oil Company, Kuwait**

#### **Role**

- Preparation of Process Flow Diagrams (PFD) and Piping & Instrumentation Diagram (P&ID).
- Design of Fire Water Network, Layout, Data Sheet etc.
- Calculate Fire Water Demand.
- Preparation of Hazardous Area Classification.
- Analysis of Fire Water Network in PIPENET.
- Hydraulic Calculation by PIPENET.
- Line Sizing Calculation.
- Working Knowledge of Various International Codes and Standards Including NFPA 11,13,15,22

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## SOFTWARE EXPERTISE

- HYSYS V8.8 (Process Simulation)
- PIPENET 1.5, FluidFlow3 (Pipe Hydraulics)
- HTRI V6 (Heat Exchanger Thermal Design)
- Auto Cad (2D Drafting)

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## EDUCATION

**Bachelor of Technology in Chemical Engineering** from Moradabad Institute of Engineering and Technology  
**UPTU Lucknow** During 2006-10.

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## TRAINING

- **4 Weeks Training** as an Environment Auditor in **SSPM Paper Mill** (Kashipur) in 2007.
  - **6 Weeks Training** in **Urea Plant** from **Tata Chemical Limited**, Babrala, Badaun, UP in 2009.
  - Complete Project During Final Year "**Production of Synthesis Gas from Natural Gas**" in 2010.
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## PERSONAL INFORMATION

- Date of Birth : 16<sup>th</sup> Feb 1986
  - Nationality : **Indian**
  - Gender : Male
  - Marital Status : Married
  - Languages : English & Hindi
  - **Passport No.** : **M3528949**
  - **Abroad Experience** : **UAE Work Permit (Permanent) 1 Year**
  - Current Working Place : Ahmedabad, India
  - Notice Period : 1 Month
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