# Curriculum Vitae SETHURAMAN.C

# INSTRUMENTATION ENGINEER

 **Home: TAMILNADU - India**

**E: sethucellam@gmail.com**

**sethuraman2615@gmail.com**

**+91 7558176979**

**+91 7094365161**

**Profile & Objective:**

15+ years of brown & green fields progressively responsible experience in multi-discipline construction, Commissioning and Startup & Operation Maintenance of Instrumentation and control system Working as instrumentation engineer in the field of process automation industries are, Oil and gas, offshore, Refinery, Petrochemical and Power Upstream & downstream and Midstream sector. Seeking a challenging assignment in Instrumentation and Control in the Oil & Gas Industry, where in my expertise attributes and skills canbe utilized, enhanced in obtaining personal career objective and those of employer.

### Professional Skills

**Brief Self-Profile:**

* Experienced in Operation & Maintenance, Commissioning of Onshore & Offshore Oil and gas and Refinery, Petrochemical, power Plant and Commissioning& Startup of various projects using Automation System of Siemens, Yokogowa, Honeywell, and Emerson.
* Crude distillation unit (CDU) reduced crude desulphurization (RCD) unit, Hydrogen production (HP) unit, Sulfur recovery unit, Amine regeneration unit, Tail gas treating unit, Sour water treatment unit and flare unit. Oil and gas processing in offshore platform.
* Attended daily progress/commissioning meetings, reporting on current situations, monitoring changes in forward planning and restrictions to progress.
* Review comments of Instrument documents- Instrument data sheets and specification, Instrument index, System Input/output list, Level sketches, Alarm & Trip Schedule.
* Implementing Graphic screens, trends, alarms configuration of System DCS and Pro-safe ESD System Confirm all loop details are correct against all project, vendor information, P&ID, I/O schedule, data sheets, instrument index on data base, alarms and trips schedule including Rack, Slot, Channel location for I/O devices check.
* Execution of the installation, testing and commissioning of components of the Automation System including the Distributed Control System (DCS), Emergency Shutdown System (ESD), Fire & Gas System (FGS), Machinery Monitoring System (MMS), Compressor Control System (CCS), instrument product system(IPS), High integrity pressure production system(HIPPS) packaged equipment systems, programming logic controller (plc.) In addition, other sub-components of the Automation System.
* Review contractor PCS commissioning documentation test procedures and previously signed off Tests, potentially requesting further evidence of test completion from EPC engineers, or enhanced checks prior to allowing EPC / client commence commissioning.
* Review EPC pre-commissioning schedules in detail, advise potential disconnects, and assist client engineering in facilitating open discussions to arrive at practical and timely solutions.
* Review and approve all Instrumentation and control system project Documents.
* Approval coordination for multi-disciplinary design, system drawings and documentation & Functional Design Specifications (FDS).
* Coordination of test plans and procedures, Factory Acceptance Testing (FAT), Field installation assistance, Site Acceptance Testing (SAT), start-up and commissioning.
* Participation in HAZOP, IPF Assessments and SIL Classification exercise in collaboration with third party consultants and Vendors.
* Distributing the work for detail engineering, collecting, checking & submitting them for client approval.
* Study of design drawing & the specifications, to be familiar with the system of the site conditions and preparing the drawings with Preliminary inspection of the installation carried out in the site and suggest for changes if required as per site condition.
* To ensure the technical quality /quality Control of documents as per Quality Management System.
* As-built drawing by Contractor review, verification and approval.
* Maintain overall schedule and communication to client, technical department, subcontractors and vendors, keeping in touch with the planning department for progress, shortfalls and with the QA/QC Department for standards and site procedures.
* Initiated contact with vendors and built solid working relationships with them.
* Completed projects by effectively applying engineering, technical and maintenance procedures.
* Manage smooth commissioning of the project by Coordinating between the company and the Contractor. Supervise and approve commissioning plans in accordance with project guidelines.
* Evaluate contractual commissioning statistics and instruction guidelines in accordance with the needs of the project.
* Create an empowering and inspiring work culture with the commissioning team.
* Deals with reviewing of all Commissioning Procedures, Preparing Operational Manuals, Method Statement/ Material Approval prior for project plan preparation.
* Ensure work will carried out competently and effectively, within time and budget constraints, and that project objectives are satisfied.
* Provides technical expertise and guidance during installation and testing of instrumentation, DCS, ESD, SCADA, F&G, HIPPS, IPS, RTU and related systems to ensure that quality facilities are deliverable to the Operations customer.
* Provides field engineering surveillance of EPC instrumentation work Monitors instrumentation construction schedule and progress.
* MOS panel shutdown and change over activities during system migration process.
* Inform PMT Management upon any derive in the schedule and propose mitigation actions.
* Review of Construction QC records prepared by construction sub-contractors prior to handover to the Client.

Inspection and surveillance on field project construction works instrument Ensuring Quality Procedures and IFC drawings being following and Implemented.

Attend and converse Client’s concern regarding the issues on construction activities and give resolution.

* Responsible for the review of materials as per specification and the suitability on area classification prior to procurement.
* Quality control and instrumentation design review competence inclusive of engineering drawings viz. loops drawing, junction box layouts, system configuration, instrument cable schedule, Hook-up drawing, and P&ID drawings.
* Competency to issue Non-conformance Reports with respect to instrument works to sub-contractor and/or Vendor Personal for rectification and/or back charge.
* Provide support to the service engineer/vendor in troubleshooting, inspection/repair, design changes and modifications to the controls systems.

**TOTAL JOB EXPERIENCE IS 15 YEARS:**

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| **7.Company**  **Project Employer**  **Position**  **Duration** | **Abu Dhabi National Oil Company (ADNOC) U.A.E**  **UPPER ZAKUAM OILFIELD DEVELOPMENT (ZADCO) Offshore**  **ADNOC Secondment Through SNC LAVALIN (PMC)**  **Sr. instrumentation & Automation Engineer**  **04-july 2019 To 08-04-2020** |

* Attending inter & contractor Department meetings.
* Responsible to review & quality of the final Design deliverable as data sheet ,index, I/o list, Cause & effect ,loop Diagram, Junction Box Wiring Diagram,
* Responsible for ensuring that all Certification, Commissioning and Handover Dossiers are complete with Construction and Commissioning to the acceptance of a system or subsystem via the RFC/RFSU certificate in completion dossier. Identify each completed activity on a RFC/RFSU dossier.
* Expedition client the purpose of gathering field information and participation in design review meeting.
* Provide input during project review of ITR / ITP including system/sub system allocation during CMS population.
* Focal Point for automation team issues for BITMAP, SAT, C&E, IFTP within designated responsible systems.
* Review designated system installation P&ID’s, PFD, logic Flow Charts, C&E, description of control systems, system graphics and control system logic diagrams recommend corrections and modifications where applicable.
* Ensure procedures are 100% complete [all necessary signatures / witnessing completed], as far as reasonably practicable identifying any system deficiencies before systems Start up and Operation.
* Update to Lead Engineer and management on a daily basis on any delays and problems.
* Review and modify construction work packs.
* On site modifications to contractor's scope of work.
* Resolve queries regarding design, equipment and installation.
* Oversaw all aspects of Instrumentation and Electrical documentation.
* Ensure installation compliance with engineering drawings, standards and specifications, Manage Redline and As-Built drawings.
* Interfacing and coordination with other discipline Field Engineers.
* Completion of ITR’S and achieving System mechanical completion cert.
* Reviewed Approval of the Instrumentation Engineering Documents Generated by the Vendors. Participation FAT, SAT, Installation Commissioning Support.
* Attendant of subsystem RFC/RFSU walk down records, identifying participants and ensure subsystem P&ID mark ups, appropriate drawings have been as-built, redline mark ups are available.
* In depth understanding PLC, DCS, and SCADA and HMI hardware / software. Programming and configuration experience is an asset.
* On-site Testing, Commissioning & Start-up, and troubleshooting experience.
* Knowledge of Smart Plant Instrumentation and Maximo software and ICAPS.
* System/Subsystem Status Index report and Punch list report extract from completion database identifying, all punch lists complete and reviewed by the Discipline Leads to ensure that known punch lists are either complete or in the outstanding punch list summary, stored by discipline and category.
* Review FAT/SAT procedures, witnessing tests, Installation, testing, commissioning at site, As-built documents and identifying spare parts requirement.
* Reporting in project to the Engineering Manager and Project Manager.
* Report any non-compliance with HSEQ requirements to the Team Manager.
* Experience in Working with controlling systems related to Fire and Gas Mapping.

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| **6.Company**  **Project Employer**  **Position**  **Duration** | **Abu Dhabi National Oil Company (ADNOC) U.A.E**  **Al Dabbiya Surface Facilities Phase III Offshore/Onshore**  **Maire Tecnimont Italy**  **instrumentation Engineer Commissioning**  **07-May 2017 To 30-June-2019.** |

* Assist Co-ordination and execution of the commissioning activities at the onshore and offshore locations.
* Reviewed substations drawings including Vendors switchgear, VFD & SCADA systems and updated the modified mark-up schematics as-built drawings.
* Supervised installation, testing, pre-commissioning, commissioning & maintenance of substation LV & MV/HV switchgear, emergency generator, motors, transformers, cables, VFD& SCADA system, UPS and Capacitor banks.
* Pre-commissioning & commissioning process area of cluster well, Production Manifold, pig launcher, gas Lift, let down areas.
* Pre-commissioning & Commissioning and brown & green fields Chrismatory valve, master valve, wing valve and Annulus valve.
* Pre-commissioning & Commissioning choke valve, SDV Valve, HIPPS Valve, PCV Valve and MOV, ROV Valves.
* Commissioning and Vendor Support to Wellhead panel (pro serve).
* Commissioning and Vendor Support to MPFM Multi Phase Flow Meter (Emerson/Roxer).
* Commissioning and Vendor Support to Fire & Gas/FACP/VESDA System (TYCO SYSTEM)
* Automation systems DCS (Honeywell Experion PKS) RTU, SCADA, and PLC.SM (safety manager).
* Have execution and working knowledge of CMS used on ICAPS Software.
* Attendant of subsystem RFC/RFSU walk down records, identifying participants and ensure subsystem P&ID mark ups, appropriate drawings have been as-built, redline mark ups are available.
* Participate in the hand over acceptance of system/s sub-system/s with the Mechanical Completion and Operations group.
* Modbus/ fiber optic (FO) cable Communication test for third party system to DCS System.
* Provide input during project review of ITR / ITP including system/sub system allocation during CMS population.
* Repaired and maintained of instruments according the manufacturers specifications.
* Monitor red lined drawings of any changes made and update as-built drawings. Assist in the compilation of final documentation.
* Input to the commissioning preparation work monitoring preservation monitoring of mechanical completion and pre‐commissioning activities commissioning temporaries, etc.
* Expert in all types of Field Instruments, Automated Valves (Pneumatic, Hydraulic, Electric), Instrument Supports, I&C Interface with Package.
* Develop testing procedures and policies aligned with commissioning best practices and regulatory requirements to ensure safety, operability, and compliance.
* Review and Ensure the availability of all safety equipment’s and operating procedures of machineries are 100% safe as per HSE program me.

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| **5.** | **Company**  **Employer**  **Position**  **Duration** | **Kuwait Gulf Oil Company & Aramco Gulf Operations (Saudi KJO Refinery)**  **Daewoo engineering and construction**  **instrumentation Engineer Commissioning**  **Dec 2015 – march 2017.** |

* The scope of the project includes Hout Oil Field, compressor, heater, recon denser, Flare, booster pump, jetty, control room and substations. The project is based Honeywell DCS Experion C300, triconex plc. For ESD system, F&G system based on RTU, machine conditioning &monitoring system by Bentley Nevada.
* maintenance activities on instrumentation and control systems in assigned field, covering gas turbine generators & controls, pumps/compressors & controls, vessels, tanks, valves & piping, distributed control system (DCS), programmable logic controllers (PLC), SCADA and fire Alarm systems.
* Ensure that instrumentation related Commissioning spares are available and maintained during Phases of the Project.
* Maintain and Preserve instrument related equipment during the Commissioning Phases of the Project up to Handover
* Coordinated with KJO maintenance team to ensure efficient loop checking.
* Monitor red lined drawings of any changes made and update as-built drawings. Assist in the compilation of final documentation.
* Commissioning & maintenance of Emergency shutdown valves ESDV/SDV/BDV (on off) with PST Operation.
* Assisted Honeywell engineer for configuring points, process values, ranges, alarm set points, Hi/Lo Trip set points, and service description for the respective loops as per the details/feedback from the client.
* Carrying out Transfer activities based on study and understanding of the process, checking of the Logic sequences, verifying Cause and Effects and thereby ensuring safe Transfer.

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| **5.Company**  **Project**  **Employer**  **Position**  **Duration** | **Abu Dhabi Oil Refine Company (Takreer U.A.E)**  **Ruwais refinery Expansion Project**  **Daewoo engineering and construction**  **instrumentation Supervisor commissioning /Maintenance**  **june2013 - Oct2015.** |

* Commissioning & Maintenance of oil movement and Storage Tank activities on instrumentation and control systems in assigned field, covering Steam turbine generators & controls, pumps/compressors & controls, vessels, tanks, valves & piping, distributed control system (DCS) Emergency Shout Down Device (ESD), compressor control corporation (CCC), Tank Gauge System (TGS), DCM (Diagnostic Communication Master) biffi MOV, Bentley Nevada Continues and Polling systems 3500.
* Thorough study of drawings and documents in design point of view and execution of job on the field as per the drawings and project general specification.
* Maintenance & Commissioning of Emergency shutdown valves ESDV/SDV/BDV (on off) with PST Operation.
* Preparation of system dossiers, instrument database, datasheet and review, Instruments hookup drawing, as built drawing.
* Ensure that instrumentation related Commissioning spares are available and maintained during Phases of the Project.
* Review vendor drawing and other technical documents to ensure proper interface and compliance with applicable contract requirements and correspond with vendor on technical matters to ensure that corrective action taken where necessary.
* Assigns preventive and corrective maintenance jobs as per the direction of Section Head. Supervises and co-ordinates activities of maintenance staff. Maintains records, prepares reports and composes correspondence related to work.

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| **4.Company**  **Employer**  **Position**  **Duration** | **waist gas program (Saudi Armco)**  **Sk engineering and construction**  **instrumentation Engineer**  **July2011-february 2013.** |

* Responsible for the calibration, testing and certification preparation for field Instruments, cable testing.
* Inspects tests, adjusts, and repairs electric, electronic, mechanical, and pneumatic instruments and systems used to indicate, record, and control generating operations in Oil & Gas plant: Inspects meters, indicators, and gauges to detect abnormal fluctuations. Instruments include different types of field devices (Pressure, temperature, level, flow, F&G devices, control valves, Shutdown valves.
* Knowledgeable with the commissioning of Emergency, Isolation and safety Instrumentation, specifically ESD systems, Equipment Isolation, Pump Tripping, Shutdown Valves, etc.
* Knowledgeable with the commissioning of DCS and Auxiliary systems (Burner Systems, Compressor Controls, etc.) and the associated fine-tuning required during commissioning.
* Clearance of system and field side punches lists.
* Wiring modification, as built drawing preparation, and co-ordination with clients.

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| **4.Company**  **Employer**  **Position**  **Duration** | **Kuwait Oil Company (Kuwait)**  **SK Engineering and construction**  **instrumentation Engineer commissioning/Maintenance**  **May 2010-June2011.** |

* Checking of all control panels all its control instruments, loop checking, panel checking, panel status etc. during plants shut down time by getting the input from supervisor command and communicating the same to him.
* Trouble shooting over hawing calibrations maintenance & various electronic & prismatic instruments such as SMART Transmitters, Tuning of controllers, indicators, Converters (l/P & P/l) Recorders, Switches, Value Petitioners, smart control values, Dampers, safety valves, ESD./ Serge control valves, solenoid values, lever trolls etc.
* Calibration Maintenance & Trouble shooting of process control instruments installed in different types of rotary & static enrolments, Tanks compressors, streams, Gas turbine instruments that included checking of solenoid valves pressure switches, vibration probes, Proximities, vibration monitor, RTDS Thermocouples, Fire and gas system etc.

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| **3.Company**  **Employer**  **Position**  **Duration** | **Ras Girtas power company (Qatar) 2730MW (Combined cycle)**  **Hyundai Engineering and construction**  **Instrumentation engineer Commissioning.**  **Oct2009-March2010.** |

* As Commissioning Engineer responsibilities includes Pre-commissioning and Commissioning of Boiler, Turbine, Axillaries and field instruments.
* maintenance activities on instrumentation and control systems in assigned field, covering gas turbine & Stream Turbine generators & controls, pumps/compressors & controls, vessels, tanks, valves & piping, distributed control system (DCS), programmable logic controllers (PLC), SCADA and fire& alarm systems.
* Support for boiler up, turbine bearing gear and synchronization.
* Wiring modification, as built drawing preparation, and co-ordination with clients.
* Woodward governor valve TPS’ trip modules tests as per Siemens test protocol, performing Master Trip String checks.
* Participated in Cascade test of Lube oil system, Control oil System, Seal Oil System etc.
* OST (Over Speed Trip) & fuel gas valves tests & their adjustments.
* GT trials run, FSNL & synchronization operation.

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| **2.Company**  **Employer**  **Position**  **Duration** | **SAUDI INTERNATATIONAL PETRO CHEMICAL (Saudi Arabia)**  **SAUDI ARABIAN KENTZ**  **Instrumentation supervisor/commissioning**  **JULY 2008 – June 2009** |

* Calibration of microprocessor Based electronic instruments lives SMART Transmitter & pneumatic instruments.
* Co-ordinate & Fallow preventive & predictive Maintenance schedule analyze all the failures & implement appropriate Corrective actions for prevention of recurrence.
* Checking of all control panels & all its control instruments, loop checking, panel charging, panel status, etc. during plant shut down time in co-ordination with the concern dept.
* Engorged in providing Turnkey solutions DCS/PLC conversion projects in the field of instrumentation for process control, which includes installation, erection, loop checking, commissioning, fault diagnosis, Trouble shooting of control panels, process control instruments & control valve.

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| **1.Company**  **Employer**  **Position**  **Duration** | **Malco (Captive Power Plant 150 MW) (India)**  **Hofincons (Transfield Services Group of Company)**  **INSTRUMENT SR. TECHNICIAN (Maintenance)**  **20-4-2005 to 31-3-2008.** |

* preventive &Maintenance of field instruments activities on instrumentation and control systems in assigned field, covering Stream Turbine & Boiler controls, feed water pumps/Air compressors & controls, vessels, Storage and detractor tanks.
* Faultfinding and repair of Low Voltage and High Voltage motor control circuits Commissioning of Fire & Gas Detection Systems.
* Maintains records of work orders, and incoming/outgoing parts.
* Performs other technical repairs, installations, maintenance as directed; may perform some non-technical assignments.
* Inspects meters, indicators and gauges to detect abnormal fluctuations.
* Removes defective instruments from system, decontaminates, disassembles, and cleans instruments and replaces defective parts. Reassembles instruments and replaces instruments in the system.

**BOSIET TRAINING HISTORY:**

* Safety Induction
* Helicopter Safety & Escape
* Sea Survival & First Aid
* Fire Fighting & Self Rescue

**HSE TRAINING HISTORY:**

* ADNOC OFFSHORE HSE INDUCTION
* Permit to work system.
* Job Hazard analyses.
* Basic First Aid, H2S & BA.
* Elementary first Aid.
* Personal safety and social responsibilities.

**EDUCATIONAL DETAILS:**

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| Educational/Technical Qualification | | |
| Education | College | Place |
| Diploma Instrumentation And Control Engineer | Srinivasa Polytechnic | Tamil Nadu-India |
| B. TECH Electronic &Instrumentation Engineer  Attestation has been done in (U.A.E) | St.Peter University | Tamil Nadu-India |

**PERSONAL PROFILE:**

**Sex : Male**

**Marital status : Married**

**Date of birth/ Age : 16-06-1986**

**Passport No/ Place of issue : M-6026660**

**Date of issue/Expiry : 20-05-2015/ 19-05-2025**

**Languages known : English, Hindi, Tamil, Malayalam.**

**D/L : India**