

SAKTHIVALE ROSHAN DHANESWAR (“Roshan”)

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IMMIGRATION STATUS: Canadian Permanent Resident. Open to relocation and travel.

EDUCATION:

The Pennsylvania State University, University Park, PA, USA

M.S. Energy and Mineral Engineering*. August 2011. G.P.A.: 3.82/4.0

*Certified by WES as equivalent to a Canadian M.S. Degree – interdisciplinary Chemical and Mechanical Engineering program. Eligible for P.Eng.

National Institute of Technology, Tiruchirappalli, Tamil Nadu, India

B.Tech. Chemical Engineering. May 2008. G.P.A.: 8.61/10.0. First Class with Distinction

CERTIFICATION:

University of California Extension, Irvine, CA, USA

Introduction to Project Management Principles and Practices Specialization. February 2016. via Coursera

Karrass, Beverly Hills, CA, USA

Effective Negotiating. Nov 2018

EXPERIENCE:

03/2018-Present: Project Manager/Engineer, Zeeco, Tulsa, OK, USA & Ontario, Canada

05/2014-02/2018: Project Manager/Engineer II, Aereon, Austin, TX & Louisville, KY, USA

05/2012-05/2014: Project Manager/Engineer I, Aereon, Austin, TX, USA

- Manage and provide technical consultancy on multi-million dollar design-build and EPC capital projects for domestic and international heavy industry (oil & gas/power/chemical/refining/facilities/wastewater/manufacturing) clients related to the design and manufacture of marine vapor recovery/combustion units, flares, thermal oxidizers, enclosed flares, electromechanical control systems, gas skids, and specialty burner and ignition systems
- Experienced in specifying both rotating (pumps, blowers, compressors, motors) and stationary equipment (valves, heat exchangers, piping, pressure vessels)
- Performed several sub-\$1M fast-track projects and \$1M-\$10M custom projects, with a workload of between 5-10 projects at any one point of time
- Act as the contact point for the customer, and attend internal and external project kick-off, HAZOP, site, and inspection meetings to ensure all stakeholders are on the same page
- Review and approve internal documentation (MDL, piping & instrumentation drawings (P&ID), process flow diagrams (PFDs), BOM, 3D models, piping layout drawings(s), I&C (PLC, VFD) documents, ITP) and ensure project meets customer specifications and applicable industry codes (ASTM, ASME, API, CSA, UL, etc.)
- Delegate tasks to the team, and interface with sales, process engineering, design, procurement, construction, quality (QA/QC), legal, and logistics on any technical or management project deliverable
- Support sub-contract management and procurement/supply chain in scope of works (SOW), selection of contractors, and 'buy-out' material vendors, and clarification of vendor technical queries/RFIs and RFQs
- Maintain project costs within assigned budget, analyze and forecast revenue, ensure timely delivery of project and documents per schedule, to improvise and use non-standard methods to meet or beat deadlines/KPIs and reduce costs under necessary circumstances
- Develop project manuals and procedures, and support aftermarket, maintenance, and commissioning (start up) teams and warranty requests at the end of the project life-cycle
- Actively manage change (MOC), and maintain a projects 'lessons-learned' register to share and create better engineering practices with fellow colleagues for the company's benefit and for mentoring new engineers
- Lead product/process standardization/innovation efforts using various inputs from technical literature, process and equipment analysis, brainstorming, industry standards, past experience, and tribal knowledge

09/2011-05/2012: Project Development Engineer, Greenbank Energy Solutions, Inc., Washington, PA, USA

- Designed and fabricated boiler combustion optimization equipment, monitoring systems, and piping systems using 2D/3D solid modeling and computational fluid dynamics (CFD) software based on customer specifications
- Responsible for vendor correspondence, procurement, material selection, generating fabrication releases, and work orders on projects
- Planned and performed several piping modification, and retrofit jobs to improve solid flow dynamics in coal power and cement based plants, and in-turn reducing plant downtime, and maintenance

- Monitor manufacturing process and manage product line, and suggest process improvements and new technologies based on previous experience and knowledge

08/2008 – 08/2011: Graduate Research Assistant, The Pennsylvania State University, University Park, PA, USA

- Performed fundamental studies to evaluate new and upcoming technology, oxy-fuel combustion as compared to conventional combustion
- Demonstrated both practically and theoretically that oxy-fuel combustion was more beneficial than conventional combustion for small boilers (60-110 MW) firing low-grade coals (lignites and subbituminous coals)

01/2010 – 05/2010: Course Project Team Member, Design of Energy and Mineral Engineering Systems, The Pennsylvania State University, University Park, PA, USA

- Conducted technical, economic and environment regulatory feasibility studies to replace coal with bioenergy (biomass/biogas) at the Penn State University steam plant
- Determined that coal-biomass blending at a 85%-15% ratio was best case, reducing coal consumption by 11000 tons/yr, CO₂ emissions by 92 tons/yr and diverting 17000 tons/yr of wood waste from the landfill
- Provided inputs on developing projects in the areas of shale gas, coal bed methane, CCS, biogas, geothermal, electrochemical systems, and PV systems

05/2010 – 08/2010: Summer Intern, The Babcock and Wilcox Company, Barberton, OH, USA

- Worked as Process Technology team intern on computational analysis of biomass boilers
- Analyzed and simulated ~20 different case scenarios. Proposed various changes to boiler and burner design based on best case to improve combustion efficiency: better burner aerodynamics and flame attachment, reduced pollutant emissions

08/2008 – 08/2011: Graduate Teaching Assistant, The Pennsylvania State University, University Park, PA, USA

- Assisted with freshman and junior level courses on energy and environment, dealing with topics related to fossil energy, biomass, solar energy, wind energy, geothermal energy, hydroelectric energy, and fuel cells
- Responsible to mentor new teaching assistants, fill in as an instructor when necessary, manage the online course management system, helped students develop problem solving techniques

05/2007 – 07/2007: Summer Intern, Indian Institute of Technology, Madras, India

- Awarded the prestigious summer research fellowship by the Jawaharlal Nehru Center for Advanced Scientific Research
- Studied and modeled bubble cavitation to prove certain liquids could be ignited if temperatures high enough were attained

11/2005 – 12/2005: Plant Trainee, Associated Cement Companies (ACC), Madukkarai Cement Works, Coimbatore, India

- Underwent training on plant operation, P&ID, process engineering, safety and cement production process at ACC's 1.18 million metric tons per annum Madukkarai cement plant

ADDITIONAL SKILLS AND INFORMATION:

- Proficient with use of ERP systems (SAP/IFS), Stage gate methodology, ISO 9001, HSE practices, MS Project, Word, Excel, Matlab, CFD, AutoCAD, Solidworks, Tecplot, Fieldview, Linux, and C/C++
- Working knowledge of pressure vessel design software, CEI Design Calcs®, and stack structural engineering software, MecaStack®
- Skilled in working in an industrial manufacturing and laboratory environment
- Certified Engineer-in-Training (EIT) by NCEES
- Awarded the 2011 departmental outstanding graduate teaching assistant award
- Published an article in scientific journal, Fuel Processing Technology based on graduate research