

## BIBEKANANDA BHATTACHARYYA

Current Location: Thane, India.

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### Career Summary:

#### **B.E. (Mechanical Engineering) & MBA;**

Delivered, managed & worked in FEED, detail, proposal & follow-on detail engineering services (domain of **EPC / LSTK / EPCM / PMC** projects) for **25+** years, with **10 years** of management experience, including a mid-level position;

**Personal Attributes:** Problem solver, high-energy, high-integrity, flexible, articulate, organized, IT-savvy, cost-conscious, global commercial mindset, quality-fit, schedule driven & customer-pro team member / leader;

**Career Objective:** Seeking to leverage my domain knowledge & rich work experience to accomplish organizational goals with efficiency & professionalism, in an environment of growth, excellence, learning & fairness that will lead towards building a long-term, fruitful association & relationship.

### Work Experience - Industry Domain:

- ❖ Petroleum Refineries, 2G-BioEthanol Plants, Hydrocarbon Mid & Downstream Complexes;
- ❖ Offshore Oil & Gas Wellhead Platforms (WHPs); Onshore Crude Oil & Gas Gathering Centers;
- ❖ Petrochemical Complexes & Onshore Oil & Gas Processing Units;
- ❖ LNG Regasification Terminals, Floating Storage Regasification Units (FSRUs);
- ❖ Chemical Plants, Pharmaceutical Plants, Fertilizer Plants, Rubber Powder Plants, Fiber & Yarn Plants;
- ❖ Combined Cycle Power Plants, Co-Generation Plants & CHP Plants;
- ❖ Super-critical Fossil Fuel Thermal Power Plants & Nuclear Power Plants;

### Work Experience Highlights:

- ❖ Delivered, managed, worked & handled in FEED, detail & follow-on engineering services for **25+** years, primarily in engineering / technical services domain of **EPC / LSTK / EPCM / PMC** projects;
- ❖ Have **greenfield / brownfield** project engineering experience;
- ❖ Built a robust **EPC / LSTK / EPCM / PMC** profile with blends of project management & people management;
- ❖ Have diverse skills of working & shouldering responsibilities on the **PMC / Consultant** side, **EPC / EPCM / LSTK** Contractor side & on the **Owner** side;
- ❖ Worked in **India, UK, Japan, Italy, Kuwait & Taiwan**; honed with a cross-cultural exposure;
- ❖ Actively involved in **in-house software architecture** finalization & **software development** and **external software evaluation** activities;

### Already Shouldered Responsibilities of

**Lead Piping Engineer; Lead Plant Layout Engineer; Lead Piping Materials Engineer; Lead Pipe Stress Analysis Engineer; Lead Mechanical Engineer (Static-Rotating-Package); Project Engineer; Deputy Piping HOD; Engineering Manager; Project Engineering Manager; Proposal Engineering Manager;**

### Core Competencies:

❖ Strong sense of ownership & commitment;	❖ High level of safety awareness with business ethics;	❖ Proven supervisory track record;
❖ Thorough understanding of all engineering disciplines;	❖ Good planning & organizing skills;	❖ Influencing skills based on logic & data;
❖ Advanced technical knowledge & skills;	❖ Up-to-date knowledge of engineering software;	❖ SMART communication skills with all stakeholders;
❖ Good command of written & spoken English;	❖ Engineering management & leadership;	❖ Engineering tracking & controls;
❖ FEED, Detail, Proposal & Estimation Engineering;	❖ Plant Layout & Piping Layout;	❖ Piping Materials & Pipe Stress Analysis;
❖ Engineering Delivery (Greenfield / Brownfield);	❖ Estimation, Budgeting & Forecasting;	❖ Strong CAD / 3D Model review skills;
❖ Strategic, critical & creative thinking;	❖ Strategic decision making based on facts & data;	❖ Up-to-date knowledge in FEA / CAE tools;
❖ Mechanical Static, Rotating Equipment & Packages;	❖ Advanced skillsets in MS-Excel VBA coding & macros;	❖ Contract review & Claims management;

### Already Proven Skills with Detailed Listing:

- ❖ All types of FEED / DE / Proposal / Estimation Engineering including greenfield & brownfield;
- ❖ All varieties of work share type projects including vertical split & horizontal split;
- ❖ All types of work scope in turnaround modifications, revamp, de-bottlenecking & brownfield initiatives;
- ❖ Translating work scope into list of engineering deliverables (DCI) & estimation of time & cost;
- ❖ Estimation of engineering work proposal, budgeting, expenditure forecasting & construction planning;
- ❖ Engineering contract review, adherence & implementation with an eye towards critical clauses;
- ❖ Plot Plan development & finalization including constructability review;
- ❖ **Piping (Layout-Stress-Materials)** Engineering Delivery & Management for FFED & DE;
- ❖ Mechanical (Static, Rotating & Packages) Engineering Delivery & Management for FFED & DE;
- ❖ PMS & VMS development & finalization from corrosion report & material selection guideline;
- ❖ Experienced in different piping materials viz. CS, LCS, SS, DSS, SDSS, Monel, Hastalloy & Titanium;
- ❖ Pipe Stress Analysis (Static & Dynamic), Piping Materials (Specification & MTO for pipes, fittings, flanges, valves, gaskets & bolting etc.);
- ❖ All types of Piping BOM / BOQ, Dashboards, Comparisons, Weights, Inch-Dia., Inch-Meter etc.;
- ❖ All types of reports viz. material selection, surface protection, insulation, coating & painting;
- ❖ Estimation of weight for modularization of pipe bridges / racks, offshore WHP etc.;
- ❖ Experienced in TQs / NCRs on materials, NDT, WPS / PQR, insulation, coating & painting;
- ❖ Thorough in 3D modeling environment, 3D walk-thru' & 3D model review packages;
- ❖ Issued specifications, MRs & quantities to procurement & for construction planning;
- ❖ Prepared presentations for clients / customers & for management reporting;
- ❖ Effective communication & coordination across disciplines on scope requirements / clarifications & delivery schedules;
- ❖ Ability to adapt to tight deadlines, heavy workloads & frequent changes in priorities & requirements;
- ❖ Applied problem-solving skillsets on EPC project design substitution cases, plant O&M issues & engineering bottlenecks;
- ❖ Adhered delivery deadlines consistently with quality deliveries;
- ❖ Efficient pooling / sharing of common manpower / resources (viz. modelling) across disciplines;
- ❖ Experienced in milestone / deliverable / manpower planning, based on outward invoicing schedule;
- ❖ Approved engineering documents either produced by external parties or internal engineering team;
- ❖ Planned internal quality audits for engineering deliverables, in tandem with external audit schedule;
- ❖ Project Engineering Interface / Execution Coordination; Engineering-Procurement Coordination;
- ❖ Held regular team meeting on target deliverables (Development / IDC / VDR / Priorities etc.), methodology & quality;
- ❖ Weekly monitoring of engineering progress based on engineering control documents;
- ❖ Forecasting trends on backlog of engineering deliverables & taking corrective actions, well in advance, before it leads to overrun of cost & schedule;
- ❖ Motivated & mentored team members towards quality deliverables at the very first attempt;

### Educational Qualifications:

Qualification	College / University	Year
Master of Business Administration (MBA) in International Business	Sikkim Manipal University	2015
Bachelor of Engineering (Mechanical Engineering)	Jalpaiguri Government Engineering College (University of North Bengal)	1992

### Work Experience Records:

#### Engineering Consultant / Self Employed – Thane, India. Nov 2020 - Present

- ❖ Engineering advisory support & delivering various reports, design basis deliverables & calculations for industrial projects;
- ❖ Greenfield cooling water / RO water system execution engineering support;

#### Chief Engineer – Piping / TechnipFMC - Mumbai, India. Jan 2017 – Oct 2020

- ❖ Managed as **Piping Engineering Mentor** for critical **FEED & DE** projects;
- ❖ **Team management** & assisted Piping HOD on discipline & project control activities;
- ❖ Delivered in several **PMC, FEED, EPC proposal & estimation engineering** (for WHP, 2G-BioEthanol, Diesel Hydrotreater, SB Rubber Powder, Chemicals & LNG) and Business Development (BD) initiatives;
- ❖ **Plot Plan development & finalization; Constructability Review; Risk Review** etc.;
- ❖ Single point technical guidance to teams towards project related deliveries & problem resolutions;
- ❖ Support, interact & coordinate with project team(s) in their relationships with clients / customers, **PMT / PMC**, vendors, subcontractors, partners & satellite offices;

- ❖ Implement, monitor & maintain productivity targets for assigned team(s), including overtime, budgeted manhours & management of scope changes associated with piping engineering & design;
- ❖ Review & spot checking of piping **deliverables (Layout-Stress-Materials)**;
- ❖ Conducted technical quality audits on various jobs;
- ❖ Conducted **trainings for Mechanical / Piping engineers** on several engineering topics;

**Deputy General Manager (Plant Design & Piping) /  
L&T Hydrocarbon Engineering Limited - Faridabad, India. May 2011 - Nov 2016**

- ❖ **Team management** & assisting Piping HOD on discipline & project activities;
- ❖ Delivered in **KOC GC-30 Kuwait project** (USD 846 Million Project Cost) for selected process areas, all utility areas & packages;
- ❖ Integrated complex process piping with vendor's package piping in **KOC GC-30 Kuwait project**;
- ❖ Delivered as Project Engineering Coordinator / Inter-Discipline Coordinator at **Al-Ghanim Kuwait for MEW Open Cycle GT Power Projects, Kuwait** (USD 450 Million Project Cost);
- ❖ Delivered as **Project Engineering Coordinator** for **Advanced Process Units (APU) of ONGC Uran, India** (USD 150 Million Project Cost);
- ❖ Delivered in several **PMC, FEED, EPC proposal & estimation engineering**;
- ❖ Support, interact & coordinate with project team(s) in their relationships with clients / customers, PMT/PMC, vendors, subcontractors, partners & satellite offices;
- ❖ Conducted **classroom trainings for engineers & designers** on piping engineering topics;

**Senior Principal Engineer – Piping /  
Foster Wheeler India Private Limited - Kolkata, India. Jul 2009 - Apr 2011**

- ❖ **Piping materials team management** (Assignment allocation, coordination & monitoring of piping activities) & assisting Piping HOD on discipline activities;
- ❖ Actively worked, guided & helped piping team members, towards detail engineering delivery in **IOCL (Indian Oil Corp. Ltd.) Paradip Refinery** for process areas Alkalization, Isomerization, SRU & SARU;
- ❖ Progress monitoring of team deliveries & piping deliverable in **Esso SriRacha Refinery, Thailand**;
- ❖ **Day-to-day coordination & real-time piping discipline work sharing** with **FWGB & FWUK**;

**Senior Mechanical Engineer /  
Kaneka Engineering Corporation - Takasago, Japan. Dec 2005 - Jun 2009**

- ❖ **Project engineering** & plant technical services of several proprietary engineering polymer projects of **Kaneka Corporation** (Location: Asia & Europe) & **Kaneka Texas Corporation** (Location: USA);
- ❖ **Engineering coordination [Piping (Layout-Stress-Materials) & Mechanical (Static-Rotating-Package)] & procurement (SCM) communication** with overseas contractors & vendors;
- ❖ Finalization of overall mechanical & piping engineering design basis;
- ❖ Finalization of Plot Plan, **Mechanical Equipment** (Static-Rotating-Package) Spec. Data Sheets;

**Deputy Chief Engineer - Piping / Tecnimont India - Mumbai, India. Dec 2003 - Dec 2005**

- ❖ **Delivered** the responsibility as **Head of Piping Materials Management Group**;
- ❖ **Administrative management & technical guidance of team**;
- ❖ Day-to-day interface coordination & real-time work sharing with **Tecnimont Milan office**;
- ❖ **Technical go-ahead / buying decision making** for piping components (fittings, flanges, valves etc.) & **SP items** (for all types of domestic & overseas procurement sourcing);
- ❖ Delivered as **Piping Materials Requisition / Specification Coordinator** (Marian Pipe Class & Requisition Module) for PP-NKNK Russia Project, Revamping & Expansion#2 of **Al-Razi Iran Fertilizers Plant** (Stamicarbon Special Urea Grade Stainless Steel), **Brindisi SpA Italy LNG Terminal Project**, **HDPE-IOCL Panipat India FEED / BEP**;
- ❖ Worked & delivered sitting at **Tecnimont Milan, Italy** as **Specialist Piping Engineer** for PP & HDPE Plants of **NPP Project, Poland & PP Plants of Borealis, Austria**;

**Senior Engineer - Piping / Aker Kvaerner - Mumbai, India. Jun 1995 - Dec 2003**

- ❖ Shouldered responsibilities & delivered in various capacities, roles & responsibilities and carried out all activities in **Piping (Layout-Stress-Materials) Engineering**;
- ❖ Developed skills of planning, managing people at work, prioritizing activities, multitasking, communication skill, teamwork, engineering interface management & inter-discipline coordination;
- ❖ Worked & delivered on **continuous improvement** initiatives with objective of reaping high incentives in similar kind of activities & projects;
- ❖ Acquired advanced skillsets in **VBA Macro** coding & prepared several time-saving tools & automated spread sheets, duly studying software architecture lessons;
- ❖ Worked & delivered as lead role in Bid / Proposal of **MSQ Upgrade Project of IOCL, Haldia (LSTK Bidder: Punj Llyod) & Mathura (LSTK Bidder: L&T / LTC)** & in following projects;

- ❖ Detail Engineering (DE) of **Gauri Offshore Oil & Gas Platform Project of Lamprell Energy, UAE;**
- ❖ DE of Sulfur Recovery Project of **CPCL, Chennai (LSTKC: Petrofac / Punj Lloyd);**
- ❖ DE of Balal Offshore Oil & Gas Platform Project under **Aker Kvaerner, Singapore;**
- ❖ DE of BDO Project of Lyondell Chemicals c/o **Aker Kvaerner, Netherlands;**
- ❖ DE of Pthalic Anhydride Revamp Project of **Asian Paints;**
- ❖ DE of **Reliance Jamnagar Refinery grass-root plant, Jamnagar;**

**Design Engineer - Mechanical /**

**Development Consultants Private Limited - Navi Mumbai, India.**

**Sept 1992 - Jun 1995**

- ❖ Applied Science-Technology-Engineering-Mathematics (STEM) lessons & acquired concepts of basic & detail engineering of Nuclear & Thermal Power projects, **Co-Generation Plant systems (BTG, GTG, STG & BOP);**
- ❖ Carried out system engineering & understood physical layout specific detail engineering for **Co-Generation Plants, Nuclear & Thermal Power Projects;**
- ❖ Learnt & worked on power projects like **BSES 2x250 MW Thermal Power Plant, Rajasthan Atomic Power Project, Kaiga Atomic Power Project, Tata Chemicals Babrala Co-Generation Plant;**
- ❖ Prepared Tender Specifications & carried out Tender Technical Evaluation for **system packages;**
- ❖ Handled project **Piping Materials Database (RDBMS) in UNIX & DOS platforms;**

**Computer Skills:**

- ❖ **CAESAR II, AutoPIPE, PVElite, CAEPIPE, TANK, AFT Arrow, DataSeer, GT Pro;**
- ❖ **AutoCAD, Revit, PDMS / E3D / PDS / SP3D Model Review, SPR, Navisworks;**
- ❖ **Windows & Microsoft Office Automation products;**
- ❖ **MS Excel Visual Basic Application Macro;**
- ❖ **SPMAT (Previously Marian 5.3.3 - Pipe Class Module & Materials Requisition Module), SMILE;**
- ❖ **HTRI HE Design; VB 6.0, C, C++, Java; UNIX, SGI O2 IRIX;**

**Training Records:**

- ❖ **Digitalization in Engineering Industry** in TechnipFMC;
- ❖ In-house **Leadership Training** Program in L&T;
- ❖ **Team Building** Workshop program in L&T;
- ❖ **Facilitation Skill Improvement** program in FWIPL;
- ❖ **Leadership Training - "EMERGE" program** in FWIPL;
- ❖ **Discipline Auditor's program** in FWIPL;
- ❖ **Bentley AutoPIPE** pipe stress analysis advanced training program in **Osaka, Japan;**
- ❖ Japanese Language Proficiency Improvement program in **Japan;**
- ❖ Trained in **PDMS** at Aker Kvaerner, Mumbai;
- ❖ Trained in **SCO UNIX** operating system at DCPL, Kolkata;

**Language Skills:**

- ❖ Read, write & speak fluently in English & Hindi - Level: Expert;
- ❖ Speak in Japanese; Level: Conversational; **Passed JLPT (<http://www.jlpt.jp/e/>) Level 4 (N4) Proficiency Test in Japanese Language;**

**Publications:**

- ❖ <http://www.cheresources.com/invision/files/file/275-significance-of-two-phase-flow-in-piping-systems/>
- ❖ <http://www.cheresources.com/invision/files/file/274-improvements-in-piping-bill-of-quantities/>
- ❖ <http://www.cheresources.com/invision/files/file/17-asme-b313-calculator/>
- ❖ <http://bibekbhattacharyya.blogspot.in/>