

Sujit Sengupta, P.Eng.

President and CEO
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FIRM

Soteria Company, LLC
2018 - Present

EDUCATION

- M.S. Technology Management, Indian Institute of Technology, New Delhi, India
- M.S. Technology in Cryogenic Engineering, Indian Institute of Technology, West Bengal, India
- B.S. in Electrical Engineering, Regional Engineering College, Kurukshetra University, Haryana, India

AREAS OF EXPERTISE

- HAZOP and FMEA of Rail and Transportation Equipment
- HAZOP and Process Design of Cryogenic and Hydrogen installations
- Intellectual Property development for the adoption of Hydrogen
- Integration of Hydrogen and Green Technologies in industries

YEARS OF EXPERIENCE

20 Years

REGISTRATIONS & CERTIFICATIONS

- Member, Canadian Safety Engineers and Professional Association
- Member, Professional Engineers, Ontario PEO, Ontario
- Member, The Association of Professional Engineers, Geologists and Geophysicists of Alberta
- Member, American Chemical Society



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TECHNICAL EXPERIENCE

Mr. Sengupta has extensive experience and expertise as a safety engineer with the design and operation of transportation and infrastructure projects in the United States and Canada. He is currently providing rail system safety security, planning, analysis and certification support for Soteria's projects in Edmonton, Canada and California.

Mr. Sengupta has qualifications as an electrical, safety and cryogenic process engineer and is known for his innovative work with cryogenics and Hydrogen. He owns Intellectual Property (IP) in this area and has a track record of successfully designing and implementing innovative projects that efficiently and effectively use Hydrogen and clean technologies among heavy industries.

Mr. Sengupta has a wide academic and global network and is currently active with prototyping industrial processes that demonstrate the successful use of Hydrogen and cryogenic technologies in mining, cement and steel manufacturing processes.

RELEVANT AND RELATED EXPERIENCE

- Soteria Co LLC – as Senior Safety Engineer, leads the Safety and Security Certification Program and the Independent Verification and Validation (IV&V) Process including supporting the development of the System Safety Program and System Security Plan for the Edmonton Valley Line LRT Project in Edmonton, Canada. Provides support in the design, construction, training, Safety and Security Verification and operational readiness and is responsible for the certification of Safety and Security Systems before Revenue Operations commence.
- Soteria Co LLC – as Senior Safety Engineer, verifies the safety and security program management including design and construction checklist and Critical Hazard Management Database. The California LRT project relies on Mr. Sengupta's support to ensure the reliability, availability and maintainability needed by the public.
- General Hydrogen Corporation – as Senior Vice-President, Safety and Engineering, led the design and construction of Thermal, Hybrid and Hydrogen Power Plants with Energy Storage Design (Enhanced gaseous Hydrogen storage). Several large projects worth \$10MMUS were all successfully and safely commissioned. Innovative process design was implemented to the Hydrogen production plants, distribution capabilities and both the liquid and gas Hydrogen storage systems which positions General Hydrogen as an ongoing and growing supplier of Hydrogen in North America.
- Air Liquide (a global industrial gas company) – as Senior Technical Manager, led the process design and hydrocarbon safety audit program across air separation plants across North America and Indian Business units. Success in this role required extensive experience in safety and quality and required skill at trouble shooting processes in order to validate their reliability. Managed the on-site supply system division with Air Liquide – India for all industrial gases including Hydrogen and Oxygen. Oversaw the upgrades at the Air Liquide's flagship Becancoeur green Hydrogen plant which remains as one of Canada's largest supply of gas and liquid Hydrogen.
- Praxair (a global industrial gas company) – as Senior Process and Safety Manager, led cross-functional, multidisciplinary and multi-location teams and provided the expertise on environmental compliance needed for the engineering and operations of multimillion dollar projects in Canada and across North America.
- Project Engineering Lead and Team Lead on focused R&D projects with the University of Western Ontario, London, Laurentian University, Sudbury and IIT Kharaghpur India in the field of Hydrogen, Cryogenic integrated systems and power generation. Leads the team skilled at computer modelling new cryogenic processes and develops specifications for the equipment needed for the safety operation of green technologies.
- Vale Canada – as Senior Maintenance / Reliability Engineer and Energy Coordinator, designed and implemented safety systems in the mine including a first of kind safety hydraulic toggle. Lead the captive power and energy optimization initiative for its flagship mine in North America. Proposed an innovative and modern process upgrade that stores Hydrogen and other cryogenic gases on site that collectively are used to reduce carbon emissions of the mining operations.
- IRAP – as a researcher, is currently demonstrating new process engineering equipment

and designs in Northern Ontario which will improve the adoption of Hydrogen in heavy industries such as mining, steel and cement production.

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