## M. Ayaz Alam - Geothermal Careerography

Geothermal Energy – Exploration & Development – Interpretation of Surface Exploration Data & Conceptual Models – Geothermal Reservoir Modeling using Leapfrog® – Well Prognosis & Logs – Environmental Permits & Monitoring – Geothermal Business Development – Due Diligence of Geothermal Projects – Legal Framework for Geothermal Development – Direct Use of Geothermal Energy – Energy Matrix – Market Trends & Policy Watch



M. Ayaz Alam is a geothermal energy professional with over 14 years of experience in exploration and development of geothermal energy resources, including for Energy Development Corporation (EDC), the largest producer of geothermal energy in the Philippines and the second largest in the world. He has experience of both direct and indirect application of geothermal energy.

He is a Geologist with Ph.D. and M.Sc. (Applied Geology) degrees from the premier technical university in India (Indian Institute of Technology Bombay, better known as IIT Bombay) and professional title of Geologist and Doctor in Geology from the University of Chile, in recognition. Besides, he has MBA (Finance) degree from AACSB and AMBA accredited business school of the University of Chile.

He has vast experience in application of geochemical techniques in exploration, development and monitoring of geothermal fields, in diverse geographic (Chile, India, Philippines, Taiwan) and geologic settings. He is an expert in integration of geothermal data from geological, geochemical and geophysical investigations and exploratory drilling for reservoir modeling using Leapfrog, well prognosis and designing. He has also been involved in direct application of geothermal energy, viz., subsurface heat anomaly studies to delineate favorable areas for direct use of geothermal energy for HVAC installations in the Metropolitan Region of Santiago, Chile.

He is well trained and experienced in geothermal reservoir modeling using Leapfrog and geothermal power plant operations and management. He has led surface exploration programs, with regular campaigns for the study of geothermal fields for feasibility studies. He has been involved in portfolio management, preparation of annual budget, elaboration of project reports for submission to various agencies, planning and logistics for the field campaigns, due diligence of geothermal projects for acquisition, negotiation with suppliers, contractors and consultants, elaboration of contracts, financing from funding agencies, environmental permissions, etc.

Besides working on projects involving direct use of geothermal energy at the University of Chile, he introduced Geothermal Geochemistry course to train the students in using geochemical techniques for geothermal exploration and development. He has published several papers in peer reviewed journals and reviewed manuscripts submitted to Elsevier, Springer Verlag, Taylor & Francis published journals.

He is well versed with the legal framework and regulations for geothermal exploration and development in the countries with geothermal development and/or potential for the same, necessary environmental and other permissions for geothermal development, financing options for geothermal projects and application process.

He is an Indian national with permanent residency in Chile and lives in Santiago, with his family. He is multilingual, fluent in English and Spanish, besides several Indian languages, viz. Hindi, Marathi and Urdu.