

- ¹U.S. Geological Survey, Denver, Colorado 80225. ²U.S. Geological Survey, Menlo Park, California 94025.
- [13] G.F. Risk, W.J.P. Macdonald, G.B. Dawson, "D.C. resistivity surveys of the Broadlands geothermal region, New Zealand", *Geothermics*, Volume 2, Part 1, 1970, Pages 287–294.
- [14] M.P. Hochstein, T.M. Hunt "Seismic gravity and magnetic studies, Broadlands geothermal field, New Zealand", *Geothermics* Volume 2, Part 1, 1970, Pages 333–346.
- [15] T.M. Hunt, J.H. Latter, "A survey of seismic activity near wairakei geothermal field, New Zealand" *Journal of Volcanology and Geothermal Research* Volume 14, Issues 3–4, December 1982, Pages 319–334.
- [16] Guido Cappetti ¹, Adolfo Fiordelisi ¹, Michele Casini ¹, Simonetta Ciuffi ¹, Alfredo Mazzotti ² "A New Deep Exploration Program and Preliminary Results of a 3D Seismic Survey in the Larderello-Travale Geothermal Field (Italy)". ¹ Enel GEM Geothermal Production, Via A. Pisano 120, 56122 Pisa, Italy. ² Earth Sciences Department-Geophysics, University of Milan, via Cicognara 7, 20129 Milan (Italy).
- [17] J. C. Jaeger, "The effect of the drilling fluid on temperatures measured in bore holes" *Journal of Geophysical Research* Volume 66, Issue 2, pages 563–569, February 1961.
- [18] Gudmundur O. Fridleifsson, Wilfred A. Elders "The Iceland Deep Drilling Project: a search for deep unconventional geothermal resources". *Geothermics* Volume 34, Issue 3, June 2005, Pages 269–285.
- [19] Ketil Isaksen, Per Holmlund Johan Ludvig Sollid, Charles Harris "Three deep Alpine-permafrost boreholes in Svalbard and Scandinavia" *Permafrost and Climate in Europe*, Volume 12, Issue 1, pages 13–25, March 2001
- [20] Hall, A., Scott, J.A. & Shang, H. (2011) Geothermal energy recovery from underground mines. *Renewable and Sustainable Energy Reviews*. 15: 916-924.
- [21] Pingjia Luo and Ning Chen Abandoned coal mine tunnels: Future heating/power supply centers School of Arts & Design, China University of Mining & Technology, Xuzhou 221116, China School of Electric Power Engineering, China University of Mining & Technology, Xuzhou 221116, China.
- [22] George R. Watzlaf, Terry E. Ackman "Underground Mine Water for Heating and Cooling using Geothermal Heat Pump Systems" *Mine Water and the Environment*, March 2006, Volume 25, Issue 1, pp 1-14.
- [23] Zbigniew MaJolepszy, "Modelling Of Geothermal Resources Witffin Abandoned Coal Mines, Upper Silesia, Poland" , Faculty of Earth Sciences, University of Silesia, ul. Bedzinska 60, 41-200 Sosnowiec, Poland.
- [24] S.A. Ghoreishi Madiseh, Mory M. Ghomshei, F.P. Hassani, and F. Abbasy. Sustainable heat extraction from abandoned mine tunnels: a numerical model. *Journal of Renewable and Sustainable Energy*, 2012.
- [25] Zbigniew Malolepszy¹, Elianne Demollin-Schneiders², Dominic Bowers³ "Potential Use of Geothermal Mine Waters in Europe" ¹ Department of Fundamental Geology, University of Silesia, Poland, ² Heerlen council, the Netherlands, ³ Midlothina council, Scotland.
- [26] Science Daily, May 2, 2012. Mining for heat: Abandoned mine tunnels might ferry geothermal energy from deep underground.

Author Profile



Eng. Gamini D Nanayakkara is a Chartered Engineer and Academic Staff member of Institute of Technology, University of Moratuwa, Sri Lanka. He has successfully completed Engineering Council UK examination and B.Tech.(Eng) degree from the Open University of Sri Lanka. He has worked in various government and private sector organizations in Sri Lanka and overseas as an Engineer and higher positions. He has high level of experience in several fields such as electronic, electrical and telecommunications. Also has many years research experience in the fields of electronics, electrical, power and telecommunication engineering and presently researching and studying about geothermal energy potential in Sri Lanka.



Professor Rahula Attalage obtained his B.Sc. Engineering (Hons) Degree from University of Moratuwa specializing in Mechanical Engineering, M.Eng in Energy Technology from Asian Institute of Technology, Thailand, D.E.A. and Ph.D. from Ecole des Mines, Paris in Energy Engineering in 1992. He is currently the Deputy Vice Chancellor, University of Moratuwa Sri Lanka, is a Senior Professor in Mechanical Engineering, University of Moratuwa and has been working in the capacity of Professor since 2003. He has held the post of Head of the Department of Mechanical Engineering and the Director Postgraduate Studies in the Faculty of Engineering, University of Moratuwa.



Dr Ranjith Premasiri is a senior Lecturer in the Department of Earth Resources Engineering, University of Moratuwa, Sri Lanka. Dr Ranjith Premasiri is a graduate of University of Peraduniya under the degree of BSc (Special) Degree in Geology with the First Class honors in 1994. Afterwards he completed his M.Phil Degree in Earth Resources Engineering from The University of Moratuwa Sri Lanka in 2006. Dr Premasiri obtained his PhD in Geophysics from Keele University, United Kingdom in 2010.