

List of Sustainability and Related Papers

M.A. Mongillo
9 September 2008

Antics, M., Papachristou, M. and Ungemach, P. (2005) Sustainable heat mining, a reservoir engineering approach. Proceedings 30th Workshop Geothermal Reservoir Engineering, Stanford University, 31 January-2 February 2005, 14 p.

Atmojo, J. P., R. Itoi, M. Fukuda, T. Tanaka, Y. Daud and S. Sudarman (2001) Numerical modeling study of Sibayak geothermal reservoir, North Sumatra, Indonesia. Proc. Twenty-Sixth Workshop on Geothermal Reservoir Engineering, Stanford University, Stanford, California, 29-31 January, 2001.

Axelsson G., Bjornsson S., Stefansson, V. 2006. How can geothermal resources be utilised in a sustainable manner, and how to estimate their sustainable potential? Energy Conference 2006 Reykjavik Oct 12-13. (translated from Icelandic).

Axelsson, G., V. Stefansson and G.Björnsson (2004) Sustainable utilization of geothermal resources. Proc. Twenty-Ninth Workshop on Geothermal Reservoir Engineering, Stanford University, Stanford, California, 26-28 January, 2004.

Axelsson, G., Stefansson, V., Björnsson, G. and Liu, J. (2005) Sustainable Management of Geothermal Resources and Utilization for 100-300 Years. Proceedings World Geothermal Congress 2005 (CD), 8 p.

Axelsson, G., V. Stefansson, and Y. Xu (2002) Sustainable Management of Geothermal Resources. In: Liu Jiurong (ed.), Proceedings 2002 Beijing International Geothermal Symposium, Beijing, China, 29-31 October 2002, p. 277-283.

Axelsson, G., A. Gudmundsson, B. Steingrimsson, G. Palmason, H. Armannsson, H. Tulinius, O. G. Flovenz, S. Bjornsson and V. Stefansson (2001) Sustainable production of geothermal energy: suggested definition. IGA-News, Quarterly No. 43, January – March 2001, 1-2.

Bibby, H. M., T. G. Caldwell, F. J. Davey, and T. H. Webb (1995) Geophysical evidence on the structure of the Taupo volcanic zone and its hydrothermal circulation. Jour. Volcano Geotherm. Res., 68, 29-58, 1995.

Bromley, C.J. (2006) Predicting subsidence in New Zealand geothermal fields – a novel approach. GRC Transactions, **30**, (CD) p. 611-616.

Bromley, C.J. (2005) The Ying and the yang of geothermal environmental management. GRC Transactions, **29**, p. 595-600.

Bromley, C.J., Rybach, L. Mongillo, M.A. and Matsunaga, I. (2006) Geothermal resources-utilization strategies to promote beneficial environmental effects and to optimize sustainability. Proceedings RE 2006, 9-13 October 2006, Chiba, Japan, 4 p.

- Butler, S. J., S. K. Sanyal, R. C. Henneberger, C. W. Klein, H. Gutiérrez, and J. S. de León (2000) Numerical modeling of the Cerro Prieto geothermal field, Mexico. Proc. World Geothermal Congress, Kyushu- Tohoku, Japan, 28 May – 10 June, 2000.
- Butler, S. J., S. K. Sanyal, A. Robertson-Tait, J. W. Lovekin and D. Benoit (2001) A case history of numerical modeling of a fault-controlled geothermal system at Beowawe, Nevada. Proc. Twenty-Sixth Workshop on Geothermal Reservoir Engineering, Stanford University, Stanford, California, 29-31 January, 2001.
- Butler, S. J., S. K. Sanyal, C. W. Klein, S. Iwata and M. Itoh (2004) Numerical simulation and performance evaluation of the Uenotai geothermal field, Akita Prefecture, Japan. To be presented at the Annual Meeting of the Geothermal Resources Council, Palm Springs, California, August 2004.
- Cappetti, G. (2004) Geothermal Energy Technologies and Strategies for Sustainable Development: the Larderello Case History. In: Proceedings International Conference Geothermal Energy and Territory, Region of Tuscany, Italy, 238-244.
- Clotworthy, A. (2000) Response of Wairakei geothermal reservoir to 40 years of production. Proc. World Geothermal Congress, Kyushu-Tohoku, Japan, 28 May – 10 June, 2000.
- Esberto, M. B. and Z. F. Sarmiento (1999) Numerical modeling of the Mt. Apo geothermal reservoir. Proc. Twenty-Fourth Workshop on Geothermal Reservoir Engineering, Stanford University, Stanford, California, 25-27 January, 1999.
- Eugster, W.J. and Rybach, L. (2000) Sustainable production from borehole heat exchanger systems. Proceedings World Geothermal Congress 2000, 825-830.
- Fridleifsson, I.B. (2005) Geothermal energy amongst the worlds energy sources. Proceedings World Geothermal Congress 2005 (CD), 5 p.
- Furuya S., M. Aoki, H. Gotoh and T. Takenaka (2000) Takigami geothermal system, Northeastern Kyushu, Japan. Geothermics 29 (2000) pp. 191 – 211.
- Hanano, H. (2003) Sustainable steam production in the Matsukawa geothermal field, Japan. Geothermics **32** (2003), 311-324.
- Haukwa, C., G. S. Bodvarsson, M. J. Lippmann and A. Mainieri (1992) Preliminary reservoir engineering studies of the Miravalles geothermal field, Costa Rica. Proc. Seventeenth Workshop on Geothermal Reservoir Engineering, Stanford University, Stanford, California, 29-31 January, 1992.
- Horne, R.N. (1982) Geothermal Reinjection Experience in Japan. J. Pet. Tech., **34**, (1982), p. 495-503.
- Kaya E., O’Sullivan M., 2006. Modelling of injection into geothermal systems. Proc. 28th NZ geothermal Workshop, Auckland Univ., New Zealand.

- Kiryukhin, A. V. (2004) Modeling study of the Mutnovsky geothermal field (Dachny) in connection with the problem of steam supply for 50 MWe PP. Twenty-Ninth Workshop on Geothermal Reservoir Engineering, Stanford University, Stanford, California, 26-28 January, 2004.
- Kissling W.M., 2006. Modelling of deep production and reinjection in a TVZ-like geothermal field. Proc. 28th NZ geothermal Workshop, Auckland Univ., New Zealand.
- Lippmann, M. J. and G. S. Bodvarsson (1985) The Heber geothermal field, California: natural state and exploitation modeling studies. Jour. Geophysical Research, Volume 90, No. B1, January 10, 1985.
- Lovekin, J. (2000) The Economics of Sustainable Geothermal Development. Proceedings World Geothermal Congress 2000, p. 843-848.
- Majer, E. and Baria, R. (2006) Cooperative research on induced seismicity in EGS. GRC Transactions, **30**, (CD) p. 623-629.
- Mannington, W., M.J. O'Sullivan, D.P. Bullivant (2004) Computer Modelling of the Wairakei-Tauhara Geothermal System, New Zealand. Geothermics, v. 33, p. 401-419.
- McGuinness, M., S. White, R. Young, H. Ishizaki, K. Ikeuchi and Y. Yoshida (1995) A model of the Kakkonda geothermal reservoir. Geothermics 24 (1995) pp. 1-48.
- McGuinness, M J. (1998) Ngawha geothermal field – a review. Proc. Twentieth New Zealand Geothermal Workshop.
- Mégel, T. and Rybach, L. (2000) Production capacity and sustainability of geothermal doublets. Proceedings World Geothermal Congress 2000, 849-854.
- Menzies, A. J., E. E. Granados, S. K. Sanyal, L. Mérida-I. and A. Caicedo-A. (1991) Numerical modeling of the initial state and matching of well test data from the Zunil geothermal field, Guatemala. Proc. Sixteenth Workshop on Geothermal Reservoir Engineering, Stanford University, Stanford, California, 23-25 January, 1991.
- Nakanishi, S. and I. Nobuyuki (2000) Reservoir simulation study of the Onikobe geothermal field, Japan. Proc. World Geothermal Congress, Kyushu-Tohoku, Japan, 28 May – 10 June, 2000.
- O'Sullivan, M., and Mannington, W. (2005) Renewability of the Wairakei-Tauhara Geothermal Resource. Proceedings World Geothermal Congress 2005 (CD), 8 p.
- Parini, M. G. Cappetti, M. Laudiano, R. Bertani and M. Monterrosa (1995) Reservoir modeling study modeling study of the Ahuachapan geothermal field (El Salvador) in the frame of a generation stabilization project. Proc. World Geothermal Congress, Florence, Italy 18-31 May, 1995.
- Pritchett, J. W. (1998) Modeling post-abandonment electrical capacity recovery for a two-phase geothermal reservoir. Trans. Geothermal Resources Council, 22, 521-528.

- Pritchett, J. W., S. K. Garg, K. Ariki and Y. Kawano (1991) Numerical simulation of the Sumikawa geothermal field in the natural state. Proc. Sixteenth Workshop on Geothermal Reservoir Engineering, Stanford University, Stanford, California, 23-25 January, 1991.
- Rybach, L. (2003) Geothermal energy- sustainability and the environment. *Geothermics*, 32, 463-470.
- Rybach, L. Sustainable use of geothermal resources: renewability aspects. IGC2003 Short Course, September 2003, UNU Geothermal Training Programme, 15 p.
- Rybach, L. (2002) Geothermal Energy: Sustainability, Environment, and the 2008 Olympic Park in Beijing, China, 2002. Proceedings 2002 Beijing International Geothermal Symposium Geothermal and the 2008 Olympics in Beijing, Beijing, China, p. 321-330.
- Rybach, L. and Eugster, W.J. (2002) Sustainability aspects of geothermal heat pumps. Proceedings 27th Workshop Geothermal Reservoir Engineering, Stanford University, 28-30 January 2002, 6 p.
- Rybach, L. and Mongillo, M.A. (2006) Geothermal sustainability – a review with identified research needs. Transactions Geothermal Resources Council Annual Meeting, **30** (2006), (CD), p1083-1090.
- Rybach, L., Mègeł, T. and Eugster, W.J. (2000) At What Time-Scale are Geothermal Resources Renewable? Proceedings World Geothermal Congress 2000, Japan, vol. 2, p. 867-873.
- Rybach, L., Mègeł, T. and Eugster, W.J. (1999) How renewable are geothermal resources? GRC Transactions, vol. 23, 563-567.
- Sakagawa, Y., M. Takahashi, M. Hanano, T. Ishido and N. Demboya (1994) Numerical simulation of the Mori geothermal field, Japan. Nineteenth Workshop on Geothermal Reservoir Engineering, Stanford University, Stanford, California, 18-20 January, 1994.
- Sanyal, S. (2005) Sustainability and renewability of geothermal power capacity. Proceedings World Geothermal Congress 2005 (CD), 13 p.
- Sanyal, S. and Butler, S.J. (2005) An analysis of power generation prospects from enhanced geothermal systems. Proceedings World Geothermal Congress 2005 (CD), 6 p.
- Sanyal, S. K., M. Pham, S. Iwata, and M. Suzuki (2000) Numerical simulation of the Wasabizawa geothermal field, Akita Prefecture, Japan. Proc. Geothermal Resources Council, Vol. 24, 24-27 September, 2000.
- Sanyal, S. K., C. W. Klein, J. W. Lovekin and R. C. Henneberger (2004) National assessment of U.S. geothermal resources. Proc. Geothermal Resources Council, Palm Springs, California, 30 August – 1 September, 2004
- Sarmiento, Z.F., Bjornsson G. 2007, Reliability of early modelling studies for high temperature reservoirs in Iceland and the Philippines. Proc. 32nd Stanford Workshop on Geothermal Reservoir Engineering, Stanford Univ. Jan 22-24, 2007. SGP-TR-183.

Signorelli, S., Kohl, T. and Rybach, L. (2004) Sustainability of production from borehole heat exchanger fields. Proceedings 29th Workshop Geothermal Reservoir Engineering, Stanford University, 26-28 January 2004, 6 p.

Sorey, M. L. (1985) Evolution and present state of the hydrothermal system in the Long Valley caldera. J. Geophys. Res., 90, 11, 219-11, 228, 1985.

Stefansson, V. (2000) The renewability of geothermal energy. Proc. World Geothermal Congress, Kyushu- Tohoku, Japan, 28 May – 10 June, 2000, 879-883.

Stefansson, V. and Axelsson. G. (2006) The sustainable use of geothermal resources. GRC Bulletin, 35, No.2, March –April 2006, 68-72.

Stefansson, V. and Axelsson, G. (2005) Sustainable utilization of geothermal resources through stepwise development. Proceedings World Geothermal Congress 2005 (CD), 6 p.

Stefansson, V. and Axelsson, G. (2003) Sustainable utilization of geothermal energy resources. IGC2003 Short Course, September 2003, UNU Geothermal Training Programme, 17-30.

Steingrímsson, B., G. S. Bodvarsson, E. Gunnlaugsson, G. Gislason and O. Sigurdsson (2000) Modeling studies of the Nesjavellir geothermal field, Iceland. Proc. World Geothermal Congress, Kyushu-Tohoku, Japan, 28 May – 10 June, 2000.

Tian, T. and Huang, S. (2005) Sustainable development of geothermal resource in China and future projects. Proceedings World Geothermal Congress 2005 (CD), 6 p.

Tulinius, H. and O. Sigurdsson (1989) Two-dimensional simulation of the Krafla-Hvitholar geothermal field, Iceland. Fourteenth Workshop on Geothermal Reservoir Engineering, Stanford University, Stanford, California, 24-26 January, 1989.

Ungemach, P., M. Antics, 2006. “Geothermal Reservoir Management – a Thirty Year Practice in the Paris Basin.” ENGINE Launching Conference, Orléans, France. <http://conferences-engine.brgm.fr/conferenceDisplay.py?confId=0>

Ungemach, P., Antics, M. and Papachristou, M. (2005) Sustainable geothermal reservoir management. Proceedings World Geothermal Congress 2005 (CD), 12 p.

Wang, K., Li, C. and Lei, H. (2005) The Sustainable development and utilization of geothermal resources in Tianjin, China. Proceedings World Geothermal Congress 2005 (CD), 4 p.

White, S.P., Kissling, W.M. and McGuinness, M.J. (1997) Models of the Kawerau Geothermal Reservoir. Transactions Geothermal Resources Council, San Francisco, 21, 33-40.

Williams, C. 2007. Updated methods for estimating recovery factors for geothermal resources. Proc. 32nd Stanford Workshop on Geothermal Reservoir Engineering, Stanford Univ. Jan 22-24, 2007. SGP-TR-183.

Wisian, K. W., D. D. Blackwell and M. Richards (2001) Correlation of surface heat loss and total energy production for geothermal systems. Proc. Geothermal Resources Council, Vol. 25, 26-29 August, 2001.

Wright, P.M. (1995) The Sustainability of Production from Geothermal Resources. Proceedings World Geothermal Congress 1995, p. 2825-2836.

Yamada, M., K. Iguchi, S. Nakanishi and N. Todaka (2000) Reservoir characteristics and development plan of the Oguni geothermal field, Kyushu, Japan. Geothermics 29 (2000) pp 151-169.

Yearsley, E. (1994) Roosevelt Hot Springs reservoir model applied to forecasting remaining field potential. Proc. Geothermal Resources Council, Vol. 18, October, 1994.