

## 8 Bibliography

- [1] *Design of concrete structures for retaining aqueous liquids*. BS 8007, 1987.
- [2] British Standard Institution, *Eurocode 1: Actions on structures, Part 1-5: General actions – Thermal actions*. BS EN 1991-1-5, 2003.
- [3] F. J. Vecchio and J. A. Sato, "Thermal Gradient Effects in Reinforced Concrete Frame Structures," *ACI Structural Journal*, vol. 87, no. 3, pp. 262-275, May 1990.
- [4] M. J. S. Hirst, "Measuring the temperature of concrete structures," University of Adelaide, 1984.
- [5] Michael Boxwell. (2009-2013) Solar Electricity Handbook. [Online].  
<http://solarelectricityhandbook.com/solar-irradiance.html>
- [6] M. J. S. Hirst, "Thermal Loading of Concrete Bridges," *Canadian Journal of Civil Engineering*, vol. 11, no. 3, pp. 423-429, 1984.
- [7] F. A. Branco and P. Mendes, "Thermal actions for concrete bridge design," *J. Struct. Eng.*, vol. 119, no. 8, p. 2313–2331, Aug. 1993.
- [8] R. Faria, M. Azenha, and J. A. Figueiras, "Modelling of concrete at early ages: Application to an externally restrained slab," *Cement & Concrete Composites* 28, no. 28, p. 572–585, May 2006.
- [9] C. P. Kothandaraman, *Fundamentals of Heat and Mass transfer*, 3rd ed. New Delhi, India: New Age International Publishers, 2006.
- [10] A. Ghali, R. Ravre, and M. Elbadry, *Concrete Structures : Stresses and Deformations*, 3rd ed. London: Chapman and Hall, 2002.
- [11] J. F. Lamond and J. H. Pielert, Eds., *Significance of Tests and Properties of Concrete and Concrete-Making Materials*. West Conshohocken, PA: ASTM International, 2006.
- [12] P. Mitchell, *Central Heating, Installation, Maintenance and Repair*. Great Britain: WritersPrintShop, 2008.
- [13] A. D. Kovalenko, *Thermoelasticity: Basic theory and applications*. [By] A. D. Kovalenko. Translated from the Russian by D. B. Macvean. With an appendix on Thermoelastic stability by J. B. Alblas. Wolters-Noordhoff Publishing, Groningen, 1969.
- [14] B. A. Boley and J. H. Weiner, *Theory of Thermal Stresses*. Robert E. Krieger Publishing

Company, Malabar, Florida., 1985.

- [15] A. Saetta, R. Scotta, and R. Vitaliani, "Stress analysis of concrete structures subjected to variable thermal loads," *J. Struct. Eng.*, vol. 121, no. 3, pp. 446-457, Mar. 1995.
- [16] ANSYSV12.0, *Release 12.0 documentation for ANSYS*. ANSYS, Inc..
- [17] L. Dahmani, A. Khennane, and S. Kaci, "Crack identification in reinforced concrete beams using ANSYS," *Strength of Materials*, vol. 42, no. 2, pp. 232-240, Mar. 2010.
- [18] L. Dahmani and M. Kouane, "Thermal Cracking Response of Reinforced Concrete Beam to Gradient Temperature," *World Academy of Science, Engineering & Technology*, no. 71, p. 1385, 2012.
- [19] A. Karunaratne, W. Mampearachchi, and A. Nanayakkara, "Modelling of thermal effects due to solar radiation on concrete pavements," 2010.
- [20] L. T. Wong and W. K. Chow, "Solar radiation model," *Applied Energy* 69, p. 191-224, 2001.
- [21] Wikipedia. [Online]. <http://en.wikipedia.org/wiki/Sunlight>
- [22] Z. Sen, *Solar Energy Fundamentals and Modeling Techniques*. Springer-Verlag London Limited, 2008.
- [23] PV Education. [Online]. <http://pveducation.org/pvcdrom/properties-of-sunlight/measurement-of-solar-radiation>
- [24] R. Levinson, H. Akbari, and P. Berdahl, "Measuring solar reflectance—Part I: Defining a metric that accurately predicts solar heat gain," *Solar Energy*, vol. 84, no. 9, pp. 1717-1744, 2010.
- [25] Denis Lenardic. (2001 - 2012, Jun.) Solar Radiation. [Online]. <http://www.pvresources.com/SiteAnalysis/SolarRadiation.aspx>
- [26] (2013) Daystar Solar Meter - Technical Specifications. [Online]. <http://www.daystarpv.com/solarmeter3.html>
- [27] (2013) Daystar Solar Meter - PV Sensor. [Online]. <http://www.daystarpv.com/spectrum.html>
- [28] K. Perera and S. Jayasekara, "Fitting generalized lambda distribution to solar radiation in Colombo, Sri Lanka," in *2012 Int. Conf. Sustainable Built Environment*, Kandy, Sri

Lanka, 2012.

- [29] T. S. G. Peiris and R. O. Thattil, "An "alternative" model to estimate solar radiation," *Cocos*, no. 10, pp. 26-34, 1994-1995.
- [30] D. Renné, R. George, B. Marion, D. Heimiller, and C. Gueymard, "Solar resource assessment for Sri Lanka and Maldives," National Renewable Energy Laboratory, August 2003.
- [31] Dennis A. Morian, "Characterization and analysis of early age concrete pavement behavior at the national airport pavement test facility (NAPTF)," Texas Transportation Institute, Texas, Research Report Report IPRF 01-G-002-04-2(s), 2007.
- [32] A. J. Chapman, *Fundamentals of Heat Transfer*. New York: Macmillan Inc, 1982.
- [33] B. Taljaston, "Temperature Development and Maturity Growth for Ordinary Swedish Portland Cement Type II," Technical University of Lulea Diploma Work , 1987.
- [34] ACPA (2002), "Albedo: A Measure of Pavement Surface Reflectance," American Concrete Pavement Association, 2002.
- [35] K. Boriboonsomsin and F. Reza, "Mix Design and Benefit Evaluation of High Solar Reflectance Concrete for Pavements," *Journal of the Transportation Research Board*, 2007.
- [36] R. Levinson and H. Akbari, "Effects of composition and exposure on the solar reflectance of Portland cement concrete," *Cement and Concrete Research*, vol. 32, no. 11, p. 1679-1698, Nov. 2002.
- [37] T. D. M. A. Samuel and R. Srikanthan, "Solar radiation estimation for Sri Lanka," in 1982 *Proc. Ann. Conf. Institution of Engineers*, Sri Lanka, 1982.