

BIBLIOGRAPHY

- Bale C.W., Chartrand P., Degterov S.A., Eriksson G., Hack K., Ben Mahfoud R., Melançon J., Pelton A.D. and Petersen S. 2002. FactSage thermochemical software and databases. *Calphad*, vol. 26, no. 2, pp. 189–228.
- Bale C.W. and Pelton A.D. 1997. The unified interaction parameter formalism: Thermodynamic consistency and applications. *Metallurgical Transactions A*, vol. 21A, July 1990, pp. 1997 – 2002.
- Ban B.-C. and Krüger J. 1988. Reduzierendes schmelzen von Quilon-ilmenit im gleichstromlichtbogenofen, *Erzmetall*, vol. 41, no. 5, pp. 278–284.
- Brimacombe J.K. 1976. Design of Continuous Casting Machines Based on a Heat-Flow Analysis: State-of-the-Art Review. *Canadian Metallurgical Quarterly*, vol. 15, no. 2, pp. 163 – 176.
- Elstad H., Hildal A., Skaar I.M. and Sorli K. 2003. Monitoring the lining of an ilmenite smelting furnace. *Heavy Minerals Conference 2003*. Cape Town. South Africa Institute of Mining and Metallurgy.
- Eriksson G. 1971. Thermodynamic studies of high temperature equilibria – III. SOLGAS, a computer program for calculating the composition and heat condition of an equilibrium mixture. *Acta Chemica Scandinavica*, vol. 25, pp. 2651 – 2658.
- Eriksson G. 1975. *Chemica Scripta*, vol. 8, p. 100.
- Eriksson G. and Hack K. 1990. ChemSage – A computer program for the calculation of complex chemical equilibria. *Metallurgical Transactions B*, vol. 21B, p. 1013.
- Eriksson G., Pelton A.D., Woermann E. and Ender A. 1996. Measurement and thermodynamic evaluation of phase equilibria in the Fe-Ti-O system. *Berichte der Bunsengesellschaft für Physikalische Chemie*, vol. 100, no. 11, pp. 1839–1849.
- Eriksson G. and Pelton A.D. 1993. Critical evaluation and optimisation of the thermodynamic properties and phase diagrams of the MnO-TiO₂, MgO-TiO₂, FeO-TiO₂, Ti₂O₃-TiO₂, Na₂O-TiO₂, and K₂O-TiO₂ systems, *Metallurgical Transactions B*, vol. 24B, October 1993, pp. 795–805.
- Eriksson G. and Rosen E. 1973. Thermodynamic studies of high temperature equilibria – General equations for the calculation of equilibria in multiphase systems. *Chemica Scripta*, vol. 4, p. 193.
- Flemings M.C. 1997. Chapter 5 – Solidification, in *Advanced physical chemistry for process metallurgy*. Editors N. Sano, W.-K. Lu and P.V. Riboud. Academic Press. pp. 151 – 182.
- Geldenhuys J.M.A. and Pistorius P.C. 1999. The use of commercial oxygen probes during the production of high titania slags. *The Journal of the South African Institute of Mining and Metallurgy*, vol. 99, no. 1, pp. 41–47.
- Gray A. and Pogo D. 1978. Physico-chemical properties of molten titania slags. *Annual volume, Metallurgical Society of the Canadian Institute of Mining and Metallurgy*, Montreal, pp. 97–102.
- GTT Technologies. 1998 *ChemSage Handbook*. Version 4.0.1.

- GTI Technologies. 2001. *ChemApp Programmers Manual*, Edition 3.5.
- Guthrie R.I.L. 1992. *Engineering in process metallurgy*. Oxford University Press, p. 483.
- Handfield G. and Charette G.G. 1971. Viscosity and structure of industrial high TiO₂ slags. *Canadian Metallurgical Quarterly*, vol. 10, no. 3, pp. 235–243.
- Kahn J.A. 1984. Non-rutile feedstocks for the production of titanium. *Journal of Metals*, vol. 36, no. 7, pp. 33–38.
- Nell J. 1999. An overview of phase-chemistry involved in the production of high-titanium slag from ilmenite feedstock. *Heavy Minerals 1999*. R. G. Stimson (ed.). Johannesburg. The South African Institute of Mining and Metallurgy. pp. 137–145.
- Noda T. 1965. Titanium from slag in Japan. *Journal of Metals*, vol. 17, no. 1, pp. 25–32.
- Pauw O.G. 1989. Dynamic simulation of pyrometallurgical processes involving fast reactions at phase boundaries. Ph.D. Thesis, University of Pretoria.
- Pelton A.D. and Blander M. 1986. *Metallurgical Transactions B*, vol. 17B, p. 17.
- Perry R.H. and Green D.W. 1997, Perry's chemical engineers' handbook, 7th Edition, McGraw-Hill International.
- Pesl J. and Eric R.H. 1999. High-temperature phase relations and thermodynamics in the iron–titanium–oxygen system. *Metallurgical and Materials Transactions B*, vol. 30B, no. 8, pp. 695 – 705.
- Pistorius P.C. 1999. Limits on energy and reductant inputs in the control of ilmenite smelters. *Heavy Minerals 1999*. R. G. Stimson (ed.). Johannesburg. The South African Institute of Mining and Metallurgy. pp. 183–188.
- Pistorius P.C. 2002. The relationship between FeO and Ti₂O₃ in ilmenite smelter slags. *Scandinavian Journal of Metallurgy*, vol. 31, no. 2, pp. 120–125.
- Pistorius P.C. and Coetzee C. 2003. Physicochemical aspects of titanium slag production and solidification. *Metallurgical and Materials Transactions Series B*, vol. 34B, no. 5, pp. 581 – 588.
- Pistorius P.C. 2003. Fundamentals of freeze lining behaviour in ilmenite smelting. *The Journal of the South African Institute of Mining and Metallurgy*, vol. 103, pp. 509 – 514.
- Pistorius P.C. 2004. Equilibrium interactions between freeze lining and slag in ilmenite smelting. *VII International Conference on Molten Slags Fluxes and Salts*, The South African Institute of Mining and Metallurgy, pp. 237 – 242.
- Pistorius P.C. 2004b. Private communications about work on high-titania slag solidification. University of Pretoria.
- Ramírez-Argáez M.A. 2003. Mathematical modelling of DC electric arc furnace operations. ISSTech 2003 Conference Proceedings.

- Reynolds Q. 2002. Thermal radiation modelling of DC smelting furnace freeboards. *Minerals Engineering*, no. 15, pp. 993 – 1000.
- Rosenqvist T. 1992. Ilmenite Smelting. Transactions of the Technical University of Košice, vol. 2, special issue, pp. 40–46.
- Ruh E. and McDowell J.S. 1962. Thermal conductivity of refractory brick. *Journal of the American Ceramic Society*. vol. 45, no. 4, pp. 189–195.
- Stanaway K.J. 1994. Overview of titanium dioxide feedstocks. *Mining Engineering*, vol. 46, no. 12, pp. 1367–1370.
- Stenkvist S.-E. and Bowman B. 1987. High-power, graphite-cathode DC arc plasma – Properties and practical applications for steelmaking and ferroalloys processing. *Plasma Technology in Metallurgical Processing*, Iron and Steel Society, pp. 103 – 109.
- Thomas B.G. and Brimacombe J.K. 1997. Chapter 8 – Process modeling, in *Advanced physical chemistry for process metallurgy*. Editors N. Sano, W-K. Lu, P.V. Riboud. Academic Press, pp. 253–279.
- Weast R.C. and Astle M.J. 1983. *CRC handbook of chemistry and physics*. 62nd Edition, CRC Press, Boca Raton, Florida, p. E-11.