

## REFERENCE LIST

- [1] Guidelines for usage of cements in Sri Lanka, SLS 1253: 2008; Appendix J: Table 6: pp 1-10.
- [2] I. Fernandez, M.F. Herrador, “Structural effects of steel reinforcement corrosion on statically indeterminate reinforced concrete members”, 2016.
- [3] M. Maalej, S.F.U. Ahmed, P. Paramasivam, “Corrosion durability and structural response of functionally-graded concrete beams”, 2003.
- [4] D. Law, Y. Du, J. Cairns, “Structural performance of corrosion-damaged concrete beams”, Magazine of Concrete Research, vol. 60, pp. 359–370, 2008.
- [5] K. Lundgren, K. Gylltoft, “A model for the bond between concrete and reinforcement”, Magazine of Concrete Research, vol. 1, pp. 53–63, 2000.
- [6] F. Biondini, M. Vergani, “Deteriorating beam finite element for nonlinear analysis of concrete structures under corrosion”, Structure and Infrastructure Engineering, vol. 11, pp. 519–532, 2014.
- [7] I. Fernandez, J.M. Bairán, A.R. Mari, “Corrosion effects on the mechanical properties of reinforcing steel bars-Fatigue behaviour, Construction and Building Materials, vol. 101, pp.772–783, 2015.
- [8] Y.C. Ou, Y.T.T. Susanto, H. Roh, “Tensile behaviour of naturally and artificially corroded steel bars” , Construction and Building Materials, vol. 103,pp. 93–104, 2016.
- [9] I. Fernandez, M. Etxeberria, A.R. Mari, “Ultimate bond strength assessment of uncorroded and corroded reinforced recycled aggregate concretes” Construction and Building Materials, vol.111:543–555, 2016.
- [10] C.G. Berrocal, I. Fernandez, K. Lundgren, I. Lofgren, “ Corrosion-induced cracking and bond behaviour of corroded reinforcement bars in SFRC”, Composites Part B: Engineering, pp. 113:123–137, 2017.
- [11] C.A. Apostolopoulos, M.P. Papadopoulos, S.G. Pantelakis, “Tensile behaviour of corroded reinforcing”, 2006.
- [12] A. Michel, A.O.S. Solgaard, B.J. Pease, M.R. Geiker, H. Stang, J.F. Olesen “Experimental investigation of the relation between damage at the concrete-steel interface and initiation of reinforcement corrosion in plain and fiber reinforced concrete” Corrosion science, vol. 77, pp. 308–321, 2013.
- [13] Ž. Smit, “Corrosion in concrete steel”, Kamnik, pp. 4-6, April 2008.
- [14] K. Shahzada, “Chloride Ingress”, Materials & concrete technology, pg.2-3.

- [15] R.D. Browne, "Mechanism of Corrosion of Steel in Concrete in Relation to Design, Inspection and Repairs", ACI Publishers, pp. 65. , 1980.
- [16] G. Batis, and E. Rakanta, "Corrosion of steel reinforcement due to atmospheric pollution", *Cement & Concrete Composites*, vol. 27, pp.269–275, 2005.
- [17] D. S. Leek," The passivity of steel in concrete", *Engineering Geology and Hydrogeology*, vol.24, pp.55-66 Available: <https://doi.org/10.1144/GSL.QJEG.1991.024.01.05>,
- [18] H.L. Golterman, *Methods for Physical and Chemical Analysis of Fresh Waters*. Blackwel Scientific Publications, Edinburg, London, Melbourne, pp. 45, 1978.
- [19] C. Alonso, C Andrade, M. Castellote, P. Castro, "Chloride Threshold Values to Depassivate Reinforcing Bars Embedded in a Standardized OPC mortar", *Cement and Concrete Research*, vol.30, pp. 1047-1055, 2000.
- [20] A.M. Neville, "Chloride attack of reinforced concrete – an overview" , *Materials and Structures*, vol. 28, pp. 63–73., 1995.
- [21] R.D. Hooton, J.A. Bickley, K.C. Hover, "Preparation of a Performance-Based Specification for Cast-in-Place Concrete", RMC Research Foundation, pp. 155., 2006.
- [22] V.L. Satish1 , V. Ravindra, "Rapid Chloride Permeability Test For Evaluating The Durability Parameters Of Corrosion Inhibiting Admixtures", Research Scholar, JNTU College of Engineering, Kakinada.
- [23] K. Shahzada," Chloride Ingress", *Materials & concrete technology*, pg. 2-3.
- [24] Bao Lu, T.C. Ling, *Chloride Penetration, Cementitious Construction Materials*", 2018.
- [25] K. Takemoto, H. Uchikawa, "Hydration of Pozzolanic Cements", *International Congress on the Chemistry of Cements-7th*, Paris, 1980, pg 1-28.
- [26] C.J. Muller, "Pozzolanic Activity of Natural Clay Minerals With Respect to Environmental Geotechnics", *Swiss Federal Institute of Technology Zurich, Switzerland*, pp. 342, 2005.
- [27] M. Lorenzo,.; S. Goni, A. Guerrero, "Activation of Pozzolanic Reaction of Hydrated Portland Cement Fly Ash Pastes in Sulfate Solution", *Institute of Construction Science Eduardo, Torroja*, pp. 123., 2002.
- [28] M. Murat, M. Driouche, "Chemical reactivity of thermally activated clay minerals", *Cement and Concrete Research*, vol. 18, pp. 221–228. (1988).
- [29] L.A. Ordonez, J. Paya,.; A.M Coats, F.P. Glasser, "Reaction of rice husk ash with OPC and portlandite". *Advanced Cement Research*, vol. 14, pp.113–119, 2002.

- [30] P. Garces, M.P. Carrion, E. G. Alcocel, J. Paya, J. Monzo, M.V. Borrachero, “Mechanical and physical properties of cement blended with sewage sludge ash”, *Waste Management*, vol. 28, pp. 2495–2502, 2008.
- [31] F. Curcio, B.A. DeAngelis, S. Pagliolico, “Metakaolin as a pozzolanic microfiller for high-performance mortar”, *Cement and Concrete Research*, vol. 28, pp. 803–809, 1998.
- [32] M. Frias, M.I.S, de Rojas, I. Menendez, M.G. de Lomas, C. Rodriguez, “Properties of Si, Mn slag as a pozzolanic material in portland cement manufacture”, *Cement and concrete research*, vol. 36, pp. 487-491, 2006.
- [33] D.V. Ribeiro, J.A. Labrincha, M.R. Morelli, “Potential use of natural red mud as pozzolan for portland cement”, *Materials Research*, vol. 14, 60–66. 2011.
- [34] P. Garces, F.P.Glasser, E. Zornoza, J. Paya, “Pozzolanic activity of a spent fluid catalytic cracking catalyst residue”, *Advances in Cement Research*, vol. 23, pp. 105–111, 2011.
- [35] E. A. de Lucas, C. Medina, M. Frías, M.S. de Rojas, “Clay-based construction and demolition waste as a pozzolanic addition in blended cements” *Construction and building materials*, vol.127, pp. 950-958, 2017.
- [36] A.M. Neville, *Properties of Concrete*, 4th ed. London: Longman Group Limited, pp. 46, 1999.
- [37] G. Malumbela, P. Moyo, M. Alexander, A step towards standardising accelerated corrosion tests on laboratory reinforced concrete specimens, Published Online: Jan. 2012.
- [38] J. Xia, W. Jin, Y.X. Zhao, L.Y. Li, “Mechanical performance of corroded steel bars in concrete”, Institute of Structural Engineering, Zhejiang University, Hangzhou, PR. China.
- [39] M.R. Mohamed, H.A. Mohamed, “Mechanical strength and corrosion detection of pozzolanic cement”, Faculty of Girls, Ain Shams University, Cairo, Egypt, 2012.
- [40] S.D Carufel, what Is the Half-Cell Potential Test [Online]. Available: <https://www.giatecscientific.com/education/what-is-the-half-cell-potential-test>
- [41] W. Yodsudjai, T. Pattarakittam, “Factors influencing half-cell potential measurement and its relationship with corrosion level”, Department of Civil Engineering, Faculty of Engineering, Kasetsart University, Bangkok, Thailand.
- [42] B.E. Backus, “Rebound Hammer Test, Gilson company, America, [online]. Available : <https://www.globalgilson.com/blog/concrete-rebound-hammer-test>
- [43] Corrosion of metals and alloys-Removal of Corrosion products from corrosion test specimens, ISO 8407, First edition,1991.

- [44] Sampling , Analysis and Testing of Concrete :Part 1, “Methods of Sampling fresh concrete and making test specimens”, SLS 262 Part 1,1974.
- [45] Specification for Testing Bond in Reinforced Concrete (Pull-Out Test), SLS 371, 1976.
- [45] Specifications for Blended Hydraulic Cements, Guidelines for usage of cements in Sri Lanka, Appendix G, pp. 36, SLS 1247, 2008.