## Dr. V. SARASWATHY

Chief Scientist & Head
Corrosion and Materials Protection Division
CSIR - Central Electrochemical Research Institute (CECRI)

Karaikudi- 630 003, Tamil Nadu, India

E-mail: vsaracorr@cecri.res.in

Phone: 04565 241380.

## **PUBLICATION DETAILS**

- ➤ HS Lee, SJ Kwon, S Karthick, V Saraswathy, S Muralidharan, Studies on the development of activated binary clay and corrosion monitoring using embedded sensor, Arabian Journal of Chemistry 13 (1), 595-605, 2020.
- ➤ M Ashok, P Jayabalan, V Saraswathy, S Muralidharan, A study on mechanical properties of concrete including activated recycled plastic waste, Advances in concrete construction 9 (2), 207-215, 2020.
- ➤ S Karthick, S Muralidharan, V Saraswathy, Corrosion performance of mild steel and galvanized iron in clay soil environment, Arabian Journal of Chemistry 13 (1), 3301-3318, 2020.
- ➤ S Karthick, S Muralidharan, HS Lee, SJ Kwon, V Saraswathy, Reliability and long-term evaluation of GO-MnO₂ nano material as a newer corrosion monitoring sensor for reinforced concrete structures, Cement and Concrete Composites 100, 74-84, 2019.
- ➤ B Li, H Liu, J Xue, Z Wang, W Shen, Graphite Ore Tailings as Partial Replacement of Sand in Concrete, ACI Materials Journal 116 (2), 133-135, 2019.
- ➤ V Maruthapandian, A Muthurasu, A Dekshinamoorthi, R Aswathy, Electrochemical Cathodic Treatment of Mild Steel as a Host for Ni(OH)2 Catalyst for Oxygen Evolution Reaction in Alkaline Media, ChemElectroChem 6 (17), 4391-4401, 2019.
- ➤ V Saraswathy, HS Lee, S Karthick, SJ Kwon, Stress Corrosion Behavior of Ungrouted Pretensioned Concrete Beams, Advances in Materials Science and Engineering, 2018.
- A Rajasekar, K Arunachalam, M Kottaisamy, V Saraswathy, Durability characteristics of Ultra High Strength Concrete with treated sugarcane bagasse ash, Construction and Building Materials 171, 350-356, 2018.

- ➤ V Maruthapandian, S Kumaraguru, S Mohan, V Saraswathy, An insight on the electrocatalytic mechanistic study of pristine Ni MOF (BTC) in alkaline medium for enhanced OER and UOR, ChemElectroChem 5 (19), 2795-280, 2018.
- ➤ V Maruthapandian, T Pandiarajan, V Saraswathy, S Muralidharan, Oxygen evolution catalytic behaviour of Ni doped Mn 3 O 4 in alkaline medium, 2018.
- ➤ K Subbiah, S Velu, SJ Kwon, HS Lee, N Rethinam, DJ Park, A novel in-situ corrosion monitoring electrode for reinforced concrete structures, Electrochimica Acta 259, 1129-1144, 2018.
- ➤ HS Lee, B Balasubramanian, GVT Gopalakrishna, SJ Kwon, SP Karthick, Durability performance of CNT and nanosilica admixed cement mortar, Construction and Building Materials 159, 463-472, 2018.
- ➤ V Saraswathy, HS Lee, S Karthick, SJ Kwon, Extraction of chloride from chloride contaminated concrete through electrochemical method using different anodes, Construction and Building Materials 158, 549-562, 2018.
- ➤ SH Jung, V Saraswathy, S Karthick, P Kathirvel, SJ Kwon, Microstructure characteristics of fly ash concrete with rice husk ash and lime stone powder, International Journal of Concrete Structures and Materials 12 (1), 1-9, 2018.
- ➤ HS Lee, V Saraswathy, SJ Kwon, S Karthick, Corrosion inhibitors for reinforced concrete: A review, Corrosion inhibitors, principles and recent applications, 95, 2018
- ➤ P Kathirvel, SJ Kwon, HS Lee, S Karthick, V Saraswathy, Graphite ore tailings as partial replacement of sand in concrete, ACI Materials Journal 115 (3), 481-492, 2018.
- ➤ MN Uddin, V Saraswathy, A Comparative Study on Clay and Red Soil Based Geopolymer Mortar, Civ. Eng. Archit 6 (1), 34-39, 2018
- ➤ V Maruthapandian, M Mathankumar, V Saraswathy, B Subramanian, Study of the Oxygen Evolution Reaction Catalytic Behavior of CoxNi1–xFe2O4 in Alkaline Medium, ACS Applied Materials & Interfaces 9 (15), 13132-13141, 2017.
- ➤ S Karthick, SJ Kwon, HS Lee, S Muralidharan, V Saraswathy, R Natarajan, Fabrication and evaluation of a highly durable and reliable chloride monitoring sensor for civil infrastructure, RSC advances 7 (50), 31252-31263, 2017.

- ➤ V Saraswathy, S Karthick, HS Lee, SJ Kwon, HM Yang, Comparative study of strength and corrosion resistant properties of plain and blended cement concrete types, Advances in Materials Science and Engineering, 2017.
- ➤ SJ Kwon, HS Lee, S Karthick, V Saraswathy, HM Yang, Long-term corrosion performance of blended cement concrete in the marine environment—A real-time study, Construction and Building Materials 154, 349-360, 2017.
- ➤ V Maruthapandian, V Saraswathy, S Muralidharan, Development of solid state embeddable reference electrode for corrosion monitoring of steel in reinforced concrete structures, Cement and Concrete Composites 74, 100-108, 2016.
- ➤ S Karthick, HS Lee, SJ Kwon, R Natarajan, V Saraswathy, Standardization, calibration, and evaluation of tantalum-nano rGO-SnO2 composite as a possible candidate material in humidity sensors, Sensors 16 (12), 2079, 2016.
- ➤ SP Karthick, A Madhavamayandi, S Muralidharan, V Saraswathy, Electrochemical process to improve the durability of concrete structures, Journal of Building Engineering 7, 273-280, 2016.
- > SP Karthick, S Muralidharan, V Saraswathy, SJ Kwon, Effect of different alkali salt additions on concrete durability property, Journal of Structural Integrity and Maintenance 1 (1), 35-42, 2016.
- > SJ Kwon, HS Lee, B Shafei, Y Wang, V Saraswathy, Concrete durability and steel corrosion, Advances in Materials Science and Engineering, 2016.