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Effect of sustained load and seawater and sea sand concrete environment on durability of basalt- and glass-fibre reinforced polymer (B/GFRP) bars

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Highlights

- A large number of FRP tensile specimens were tested after exposure to SWSSC corrosive solution
- Coupling of stress, corrosion and temperature significantly accelerates the degradation of FRP bars
- Scanning electrical microscopy (SEM) was adopted to analyse degradation mechanism
- Long-term predictions of BFRP/GFRP bars using the current model are conservative

ABSTRACT

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