

## **GFRP composite material degradation under seawater and weathering effect**

### **Abstract**

An experimental investigation of the seawater effect on the degradation of GFRP composite material with respect to water absorption was conducted. The GFRP specimens were exposed to seawater and weather environment. Water absorption analysis was conducted to investigate the moisture uptake and degradation of woven GFRP. The woven GFRP percentage weight gain due to moisture uptake were 0, 0.253, 0.513, 0.752, 0.732, 0.752, and 0.997 % of the initial weight, after 1, 2, 3, 5, 8, 48, and 168 immersion hours. Degradation of GFRP was also found to correlate to the corrosion and uptake of seawater at the fibre/matrix interface. © Springer Science+Business Media New York 2013.