



**FACULTY OF ENGINEERING AND SCIENCE**

Engineering, Science, Medway School of Pharmacy and NRI

**RESEARCH SYMPOSIUM**

Pembroke Wardroom (P129) and P134

**SUBMISSION ACCEPTANCE**

**Title**

Corrosion induced by sulfuric acid – method of concrete material properties upgrade?

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**Abstract**

Sulphuric acid induced concrete corrosion is an acknowledged problem in water and by large waste water industry, where sewer pipes are most at risk due to early failure. Currently, there are very little studies of concrete behaviour due to sulfuric attack. This paper tries to fill some of the knowledge gaps in the field and reports on experimental results of concrete samples being emerged into acidic environment for a length of three months under different temperatures and pH conditions. In this study, it was revealed that apart from the predicted corrosion rates concrete samples gained overall mass in the first weeks, which had a positive impact on their density and hence compressive strength.