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Poster ☒ Oral ☐

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### **Resistance to pitting in different chloride concentrations of AISI 316L steels modified with niobium additions**

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#### **Abstract**

The present work aims to evaluate the influence of chloride concentration on pitting corrosion in modified AISI 316L steels with 0.1%, 0.2% and 0.4% niobium additions. The samples were submitted to electrochemical tests in deionized water and with small percentages of sea water (SW) up to 100% of SW, obtaining potentiodynamic polarization curves to observe the pitting potential ( $E_p$ ). A potentiostat was used, coupled to a 3 electrode electrochemical cell (work, reference and auxiliary) transmitting the data to a microcomputer with Voltamaster4 software. It was concluded that in 10% of SW the appearance of pits is observed, the potential that is formed decreases with increasing chloride concentration, being the highest potentials in samples with 0.1% niobium.

**Keywords:** Chloride, 316L, Pite.

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