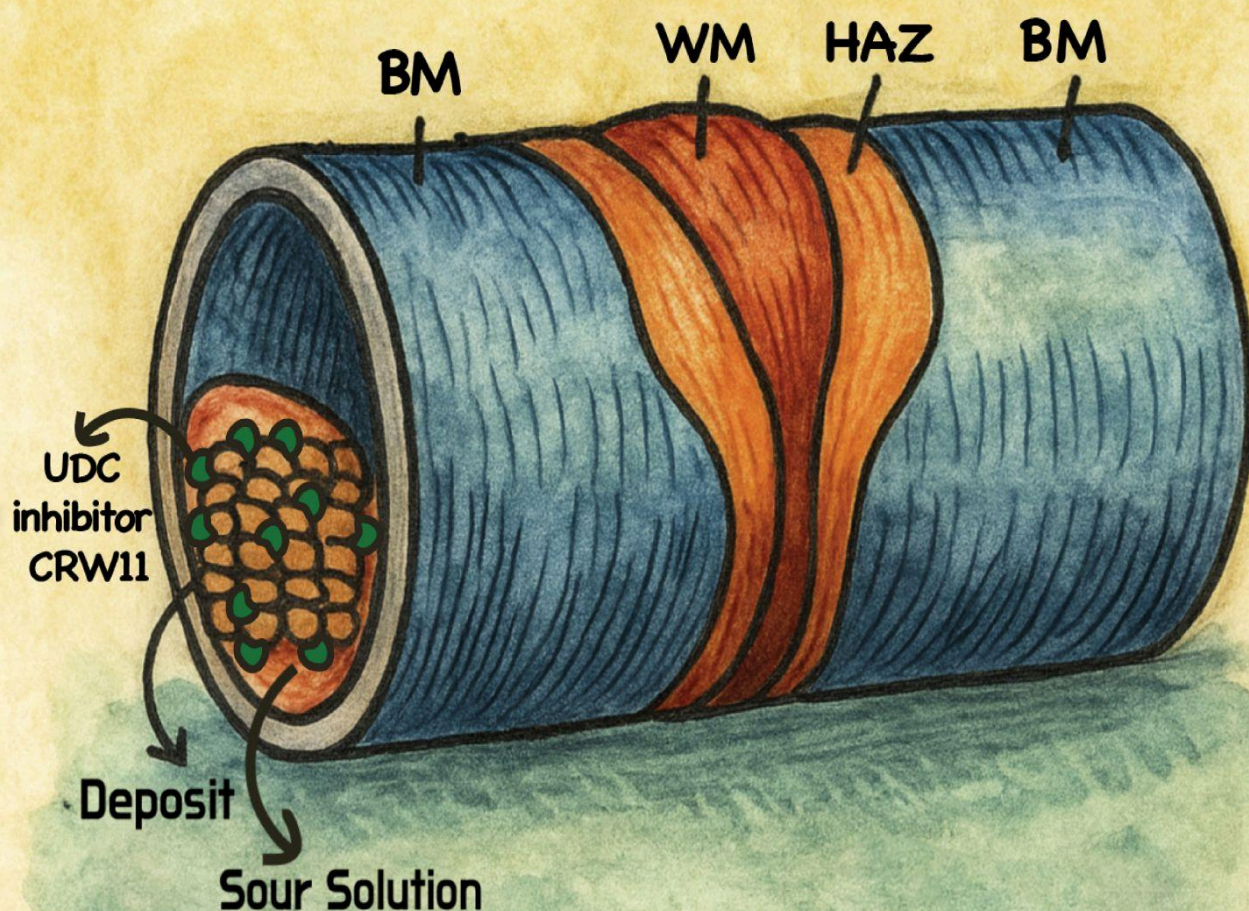


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About the Cover:

According to this study, preferential weldment corrosion (PWC) and pitting of carbon steel (CS) deposits under sour circumstances is exacerbated by FeS and FeS₂ deposits, particularly in the heat-affected zone (HAZ). However, the PWC was effectively reduced by an amine-based CRW11 inhibitor. Machine learning models (decision tree and extreme gradient boost) accurately predicted the inhibition efficiency for practicable corrosion management.