## عنوان مقاله:

Effect of Sodium Saccharin on Hardness and Cavitation Behavior of Ni Base Coatings

## محل انتشار:

دهمین همایش مشترک و پنجمین کنفرانس بین المللی انجمن مهندسی مواد و متالورژی و انجمن علمی ریخته گری ایران (سال: 1395)

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## خلاصه مقاله:

The cavitation erosion behavior of Ni-base coatings which were electrodeposited in a modified watt's bath containing different percentages of sodium saccharin was investigated using an ultrasonic vibratory apparatus in distilled water. The erosion rate (ER) curves vs. time were obtained by cavitation erosion tests, carried out according to ASTM G32 standard during 4 h, with periodical interruptions for registering the mass losses. Scanning electron microscopy (SEM) was used to study the surface morphology of the coatings. In addition the microhardness of the coatings were examined. The results revealed that increasing concentration of Saccharin in the bath to a certain amount, would result in an increase of microhardness while cavitation erosion rate decreased. Increasing the concentration of Saccharin in the bath more than the optimum amount led to a higher cavitation rate

## کلمات کلیدی:

Cavitation Erosion, Ni Coatings, Microhardness, Sodium Saccharin