

## EH P 2

**Uticaj termomehantičke obrade na elektrohemijsko ponašanje sinterovanih bakar-zlato legura**

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Sinterovane Cu-Au legure podvrgnute su kompleksnoj termomehantičkoj obradi koja je obuhvatala: predzavršno valjanje, rastvorno žarenje sa kaljenjem, završno valjanje i žarenje ispod i iznad temperature rekristalizacije. Vršeno je merenje potencijala otvorenog kola i primenjena je metoda ciklične voltometrija u 0,1 M rastvoru NaOH, u cilju analize elektrohemijskog ponašanja sinterovanih Cu-Au legura nakon različitih stadijuma termomehantičke obrade. Primenjena termomehantička obrada uslovia je promene u mikrostrukтури, što je uticalo i na promene u elektrohemijskom ponašanju sinterovanih Cu-Au legura. Završno valjani uzorci pokazali su najbolju korozionu postojanost u odnosu na ostale termomehantički obrađene uzorke.

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**The influence of thermo-mechanical treatment on the electrochemical behavior of sintered copper-gold alloys**

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Sintered Cu-Au alloys were subjected to the complex thermo-mechanical treatment, which included: pre-final rolling, solution annealing followed with quenching, final rolling and annealing under and above the recrystallization temperature. The open circuit potential measurements were performed and the cyclic voltammetry method was applied in a 0.1 M NaOH solution in order to analyze the electrochemical behavior of sintered Cu-Au alloys after different stages of thermo-mechanical treatment. The applied thermo-mechanical treatment caused changes in the microstructure, which also influenced the changes in electrochemical behavior of sintered Cu-Au alloys. Finally rolled samples had the best corrosion resistance compared to the other thermo-mechanically treated samples.

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