

# STUDI SERAPAN ION NIKEL OLEH BIOMASSA FITOPLANKTON (*Tetraselmis chuii*)

Bahrizal

Dosen Jurusan Kimia FMIPA Universitas Negeri Padang

**ABSTRACT:** *In the present work, the process of nickel-ion adsorption by T. chuii biomass have been investigated. This investigation intend to determinate capacity of adsorption the biomass for nickel ion in water. A weight of 100 mg biomass was put ionto 5 ppm of the metal-ion solution whose pH varied from 5.0 to 7.5. Then, these solutions were stirred for 30 minutes. After filtering, the metal-ion concentration in the filtrate was determined by atomic absorption spectrometry. The amount of ion adsorbed by the biomass was taken as the difference between the initial and final concentration of the solution. Further, the same method was carried out to the varied concentration. The result showed, the optimum pH for metal-ion adsorption by the biomass is 7.0, having adsorption value 0,918 mg/g biomass. Capacity of nickel-ion adsorption was obtained by varied concentration, yielded value of 2,370 mg/g.*

**Key word:** T. chuii, biomass, adsorption, spectrometry