

**Sodium Alginate Film with Antibacterial properties**  
**A PROJECT REPORT SUBMITTED IN PARTIAL FULFILLMENT**  
**OF THE REQUIREMENTS FOR THE DEGREE OF**  
**Master of Science**  
**In**  
**Chemistry**  
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## **1 Abstract**

In this work. The film based on SA were prepared by solution casting method. Calcium chloride was used as a crosslink agent with different ratios. The physical properties of the film were investigated in term of and the structure of the film was characterized by Fourier transform infrared spectroscopy. Antimicrobials activity in leaf extract of cumin seeds powder against human pathogenic bacteria E.Coli. extract showed a broad spectrum of very significant antibacterial activity by producing a clear zone of inhibition against E. Coli.

## **2 Objectiv**

Synthesiss Sodium Alginate Film with Antibacterial properties