**Characterising the Progress of Gelation in**

**Tofu Making with Ohmic Heating**

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**Abstract**

**In tofu making by heat treatment, the addition of coagulant ionizes the proteins as a result of heat**

**dissolution and the ionized proteins aggregate with the coagulant to form protein clusters. The**

**electrical conductivity (EC) of the soya milk emulsion varies in response to the progress of gelation.**

**By ohmic heating, the applied current and voltage directly indicate the electrical conductivity**

**of the soya milk emulsion and then indirectly the progress of tofu gelation. In this paper, ultrasonic**

**measurement is adopted to explore the feasibility of using EC as an indicator of tofu gelation.**

**Experiments showed a strong correlation between EC and ultrasonic measurement in characterisation**

**of tofu gelation.**

**Keywords**

**Ohmic Heating, Electrical Conductivity, Ultrasound, Gelation**