

## 11<sup>Th</sup> Khwarizmi International Award Feb 1998

**Guest of Honor** 

Researcher: Kaida Bin Khalid

Research Title: Microwave dielectric properties of hevea rubber latex

Field: Electronic and Computer

**Country:** Malaysia

Abstract:

A rapid growth of microwaves system has taken place after the Second World War in the area of telecommunication and navigation in both civilian and military. However, industrial, scientific, medical and domestic applications have developed at a slower pace. By far, the most popular application of microwave power is in microwave oven for domestic and commercial cooking. On the other hand, a greater variety of industrial applications of high microwave power has been demonstrated including applications in various industries such as rubber, food, textiles, plastics, foundry, building materials, paper, pharmaceuticals, cosmetics, and coal. The main advantage of microwave power in processing of materials is increased rate of production, improved product characteristics, uniform processing and controllability of the process.

Natural rubber and palm oil are two important commodities for Malaysia as well as tropical countries. The aquametry or determination of moisture content of these agriculture products required special attention. Its significance covers aspect on quality, industrial process control and determination of maturity of the fruits. Hevea rubber latex is generally visualized as a suspension of latex particle in an aqueous serum.

Dr. Kaida bin Khalid was born on July 8 1952 in Chukai, Kemaman Trengganu. He entered National University of Malaysia and received B.Sc. in Physics in 1976 then he obtained MSc degree in Solid State Physics from Bedford College, University of London in 1978.

Dr. Khalid had to shift from Physics to Engineering because of his interest in Microwaves, which offers more facilities and expertise in the area. In 1986, he obtained his Ph.D. in Electronic and Electrical Engineering from University of Birmingham, the area of microwave sensor.

He was appointed as a lecturer in 1979, Associate Professor in 1991 and from 1992-1994 he was appointed as Head of Physics department.

