

## **SECTION D**

### **D - 26 A COMPARATIVE STUDY OF THE DISTRIBUTION OF NITRATE IN WELL WATERS AROUND GALGAMUWA, SRI LANKA**

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A survey was carried out on the Nitrate content in drinking water from wells around Galgamuwa, a town in the dry zone of Sri Lanka. Water samples were collected from the dug wells which were deepened down into the bedrock through a thick overburden. The Nitrate content was measured using spectrophotometric technique.

From the analysis no relationship could be established between nitrate in water and different rock types and their structure. However there was a relationship found to occur between the nitrate ion in the water and elevation of the dug wells related to mean sea level. Well waters near paddy fields contained over 50 mg/l of nitrate, indicating the excessive usage of artificial fertilizers and pesticides. This is dangerous and may result in affecting the consumers, especially infants, with a disease called Methaemoglobinemia.