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Title: **Cell Tower measurements in various areas of Trinidad and Tobago and international standards.**

Authors: **Ronald Seecharan**
Haseeb Mohammed

Supervisors: **Prof. R. Saunders**
Dr. Dave Chadee

There is considerable controversy over mobile telephone base stations due to the possible health impact on citizens. This study deals with taking radio frequency (RF) power density measurements using the Holaday Industry hand held reader (HI-4460) and the Holaday Industry hand held probe (HI-4433) and our measurements were compared with known international standards. Measurements were performed at Siparia and Tableland.

At the different mobile base stations the following aspects of power density was investigated: Topography and its relation to power density. Power density fluctuation for a B-Mobile base station, measurements were taken approximately 100 meters from the base station at the four cardinal points. Power density fluctuation at multiple B-Mobile base stations and between mobile base stations where measurements for any power density fluctuation. Power density changes between Digicel and B-Mobile mobile base station, measurements were taken between the mobile base stations using the operational frequency of Digicel and B-Mobile. Investigating and making the relationship if any between the power density emission from mobile base stations and its health on humans. The results indicated that there was no exceeding the known international standards for the various measurements taken at both towers. The results have shown very few fluctuations as well as very low values were obtained. The results averaged around 0.0021-0.0023 in W/cm^2.