Ottawa, 1973).

The firm has also developed a new radio telemetry heart rate monitor which operates in conjunction with a tiny radio transmitter and hand-held receiver capable of interference-free monitoring within about ten metres.

Another of its products, an "electronic gym", measures the electrical activity of various muscle groups during isometric exercise. This is achieved by applying a sensor pad over a particular muscle group where the individual can learn how to exercise these muscles in the most effective manner before moving on to a more rigorous level. Muscle tension and soreness, a common symptom of unreleased, pent-up stress, can be monitored with another Biosig Instruments product, a biofeedback device. The light-weight, portable unit, worn around the head, measures electromyograhic (EMG) activity from the "frontalis" or forehead and scalp muscles. It converts the EMG signal into a pleasant, audible tone proportional to the amount of tension monitored from the muscles. By listening to the tone, the individual develops an awareness of when these muscles are under tension and, over time, how to better relax them and relieve tension. An associated type of biofeedback device is valuable for relieving headache-causing muscle tension.

Biofeedback systems, designed to help a patient, possibly with headaches due to stress, are in ever-increasing use today. By demonstrating to the individual the types of situation or circumstances under which the stress occurs and the subsequent symptoms, an expert can help the individual "learn" ways to avoid undue tension and thereby avoid those symptoms.

The system measures various changing body conditions such as temperature, blood pressure, heart rate and perspiration, all internal body responses to varying conditions of stress.

