INTRODUCTION
The determination of the time of exercise to exhaustion at the minimum velocity that elicits maximal oxygen consumption (Tlim-vVO2max) has arisen in the last years, and seems to be very interesting for assessing various aspects of performance and training of endurance athletes (Billat et al., 1994). Although swimming isn’t considered to be a typical endurance sport, it seems very important to study the maintenance of the swimmers at intensities correspondent to their aerobic power. The purpose of this study was to measure the Tlim-vVO2max and to verify the existence of an oxygen uptake slow component (O2SC) in swimming, on swimming-pool conditions, as it was observed for Demarie et al. (2001) in flume swimming for pentathletes.

METHODS
Ten physical education students participated in this study (23.1±3.3 years, 169.5±8.5 cm, and 61.9±9.3 Kg). Each subject performed a continuous incremental protocol for freestyle vVO2max assessment, starting at 0.9m/sec, with increments of 0.05m/sec per 200m stages. VO2max was considered to be reached according to traditional physiological criterions, and vVO2max was consider as the swimming velocity correspondent to the first stage that elicits VO2max. 48h later, they swam to exhaustion at vVO2max to assess Tlim-vVO2max. O2SC was calculated as the difference between the last VO2 measurement and the one measured during the 3rd minute of exercise (Demarie et al. 2001). VO2 was directly measured using a Sensormedics 2900 oxymeter mounted on a special charriot running along the pool. Swimming velocity was controlled using a visual pacer (GBK-Portugal). [LA-] were measured before, immediately, and 3min after both tests, using an YSI1500 auto-analyser, and heart rate was monitored with a Polar advantage system.

RESULTS AND DISCUSSION
Results pointed out a mean VO2max of 3372.0±841.6ml.min⁻¹ and 54.2±8.2ml.Kg⁻¹.min⁻¹ in the incremental test. Obtained vVO2max was 1.19±0.08 (m.sec⁻¹). The
mean duration of the TLim-vVO2max test was 325±76.5 sec. No significant differences were noticed in VO2max and maximal heart rate between the two tests. Nevertheless, maximal blood lactate concentration was significantly different between the incremental and the rectangular tests (7.8±1.4 vs. 10.9±2.3 mM.l⁻¹, p=0.001). A slow component of VO₂ kinetics (O₂SC) appeared in the all out swim at vVO₂max (279.0±195.2 ml.min⁻¹), and it was found to be correlated to the TLim-vVO₂max (r=0.744, p=0.014). In conclusion, O₂SC is observed also in swimming-pool conditions, and it is correlated with TLim-vVO₂max. Meanwhile, TLim-vVO₂max is in accordance with typical formulations of aerobic power training sets for swimmers.