

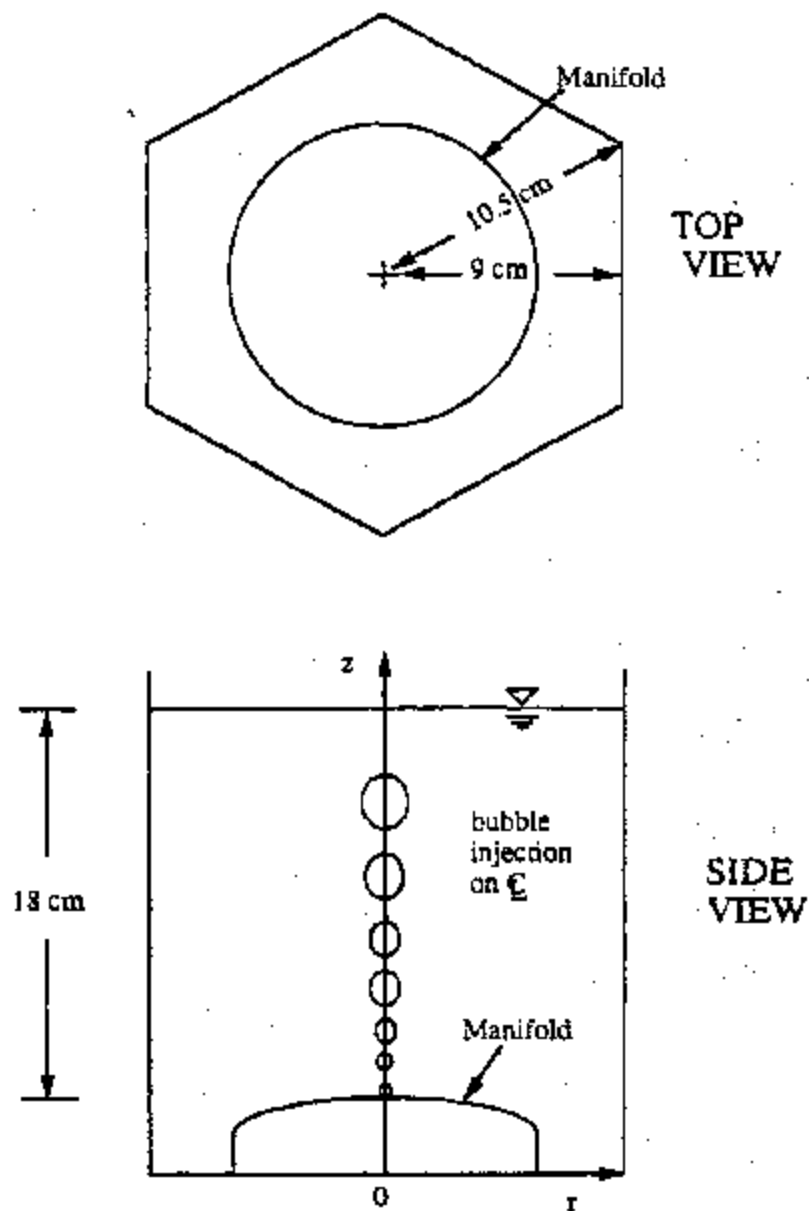


Figure 3.2.1 Schematic of hexagonal cross-section bubble column for laser Doppler velocimeter (LDV) measurements.

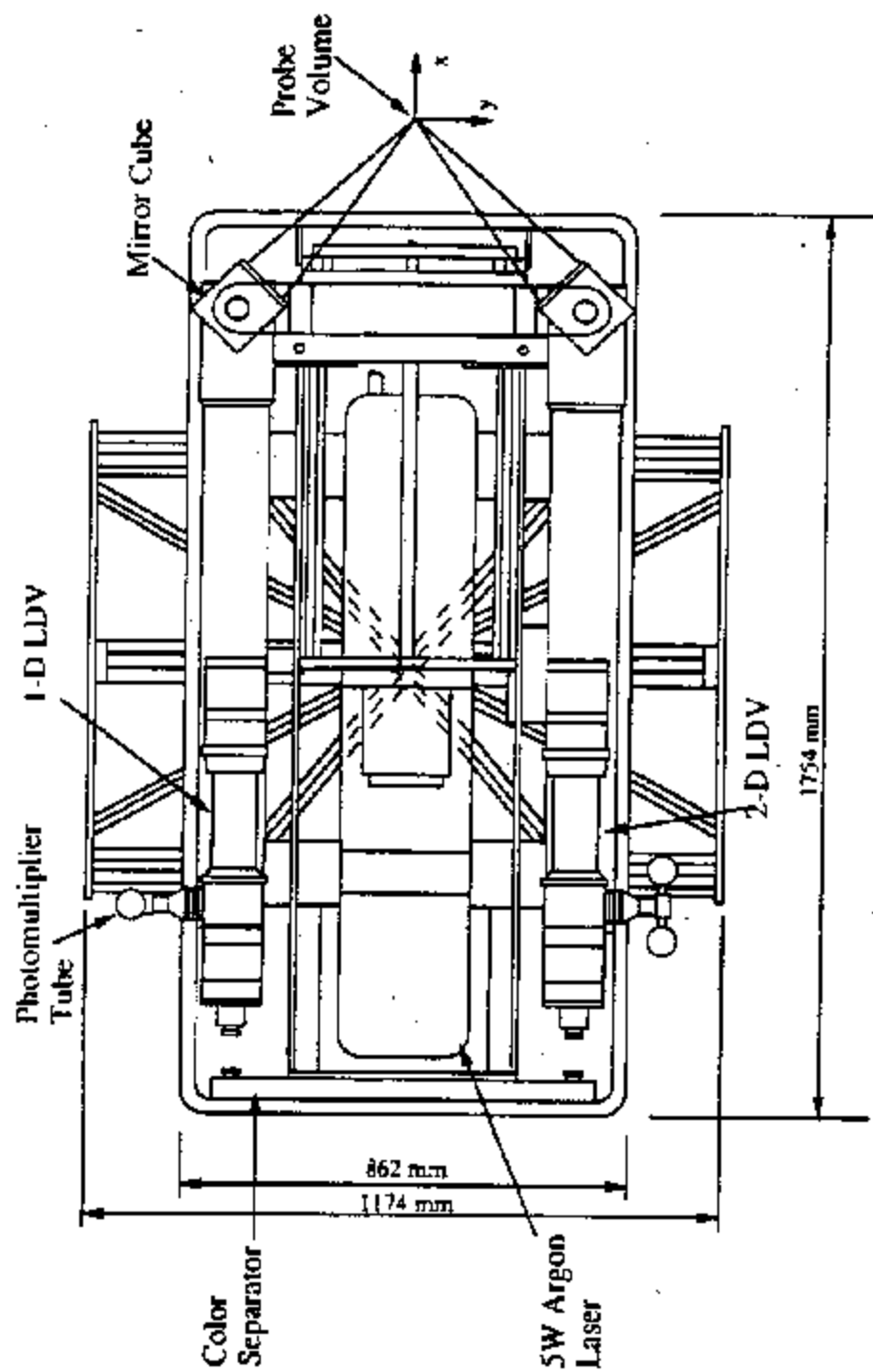


Figure 3.2.2 Top view of three-component laser doppler velocimeter (LDV).

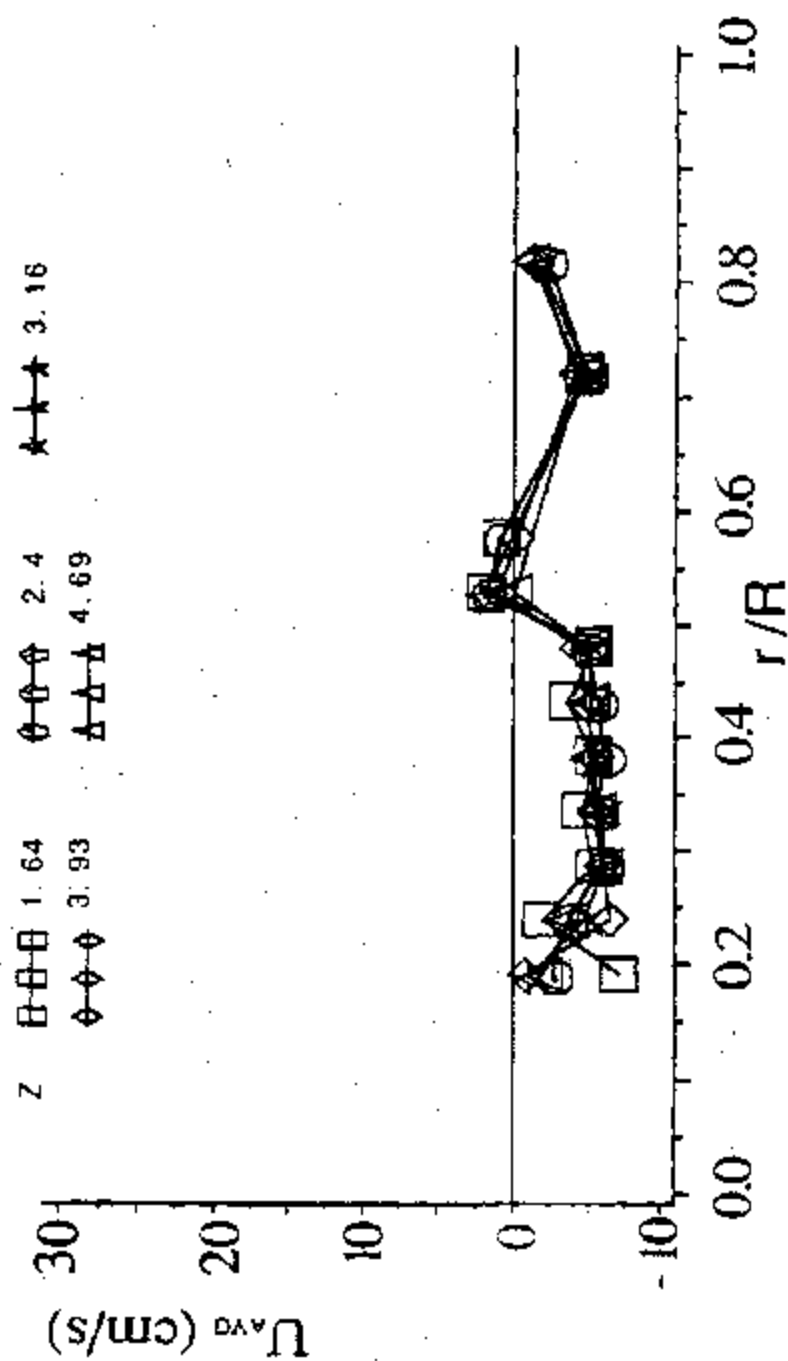


Figure 3.3.1 Average radial bubble velocity measurements in the bottom quarter of the bubble column.

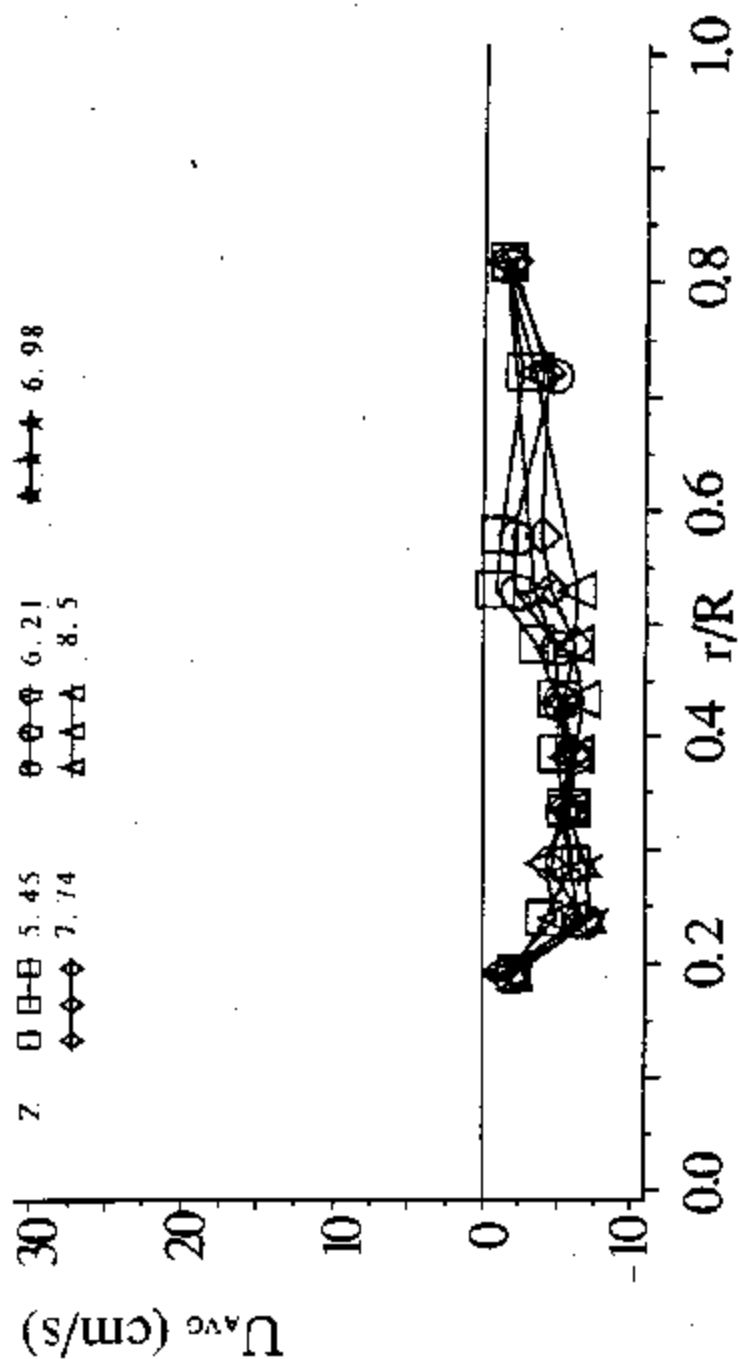


Figure 3.3.2 Average radial bubble velocity measurements in the second quarter of the bubble column.

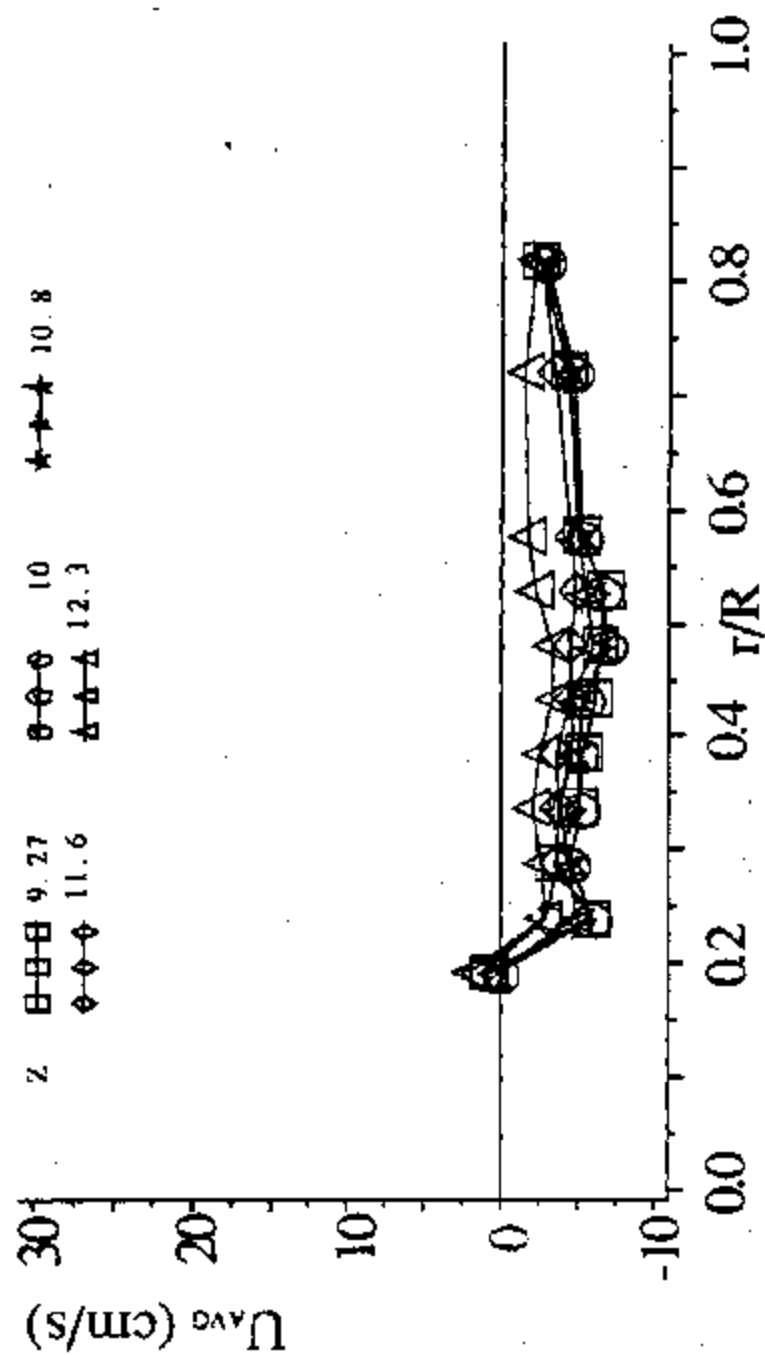


Figure 3.3.3 Average radial bubble velocity measurements in the third quarter of the bubble column.

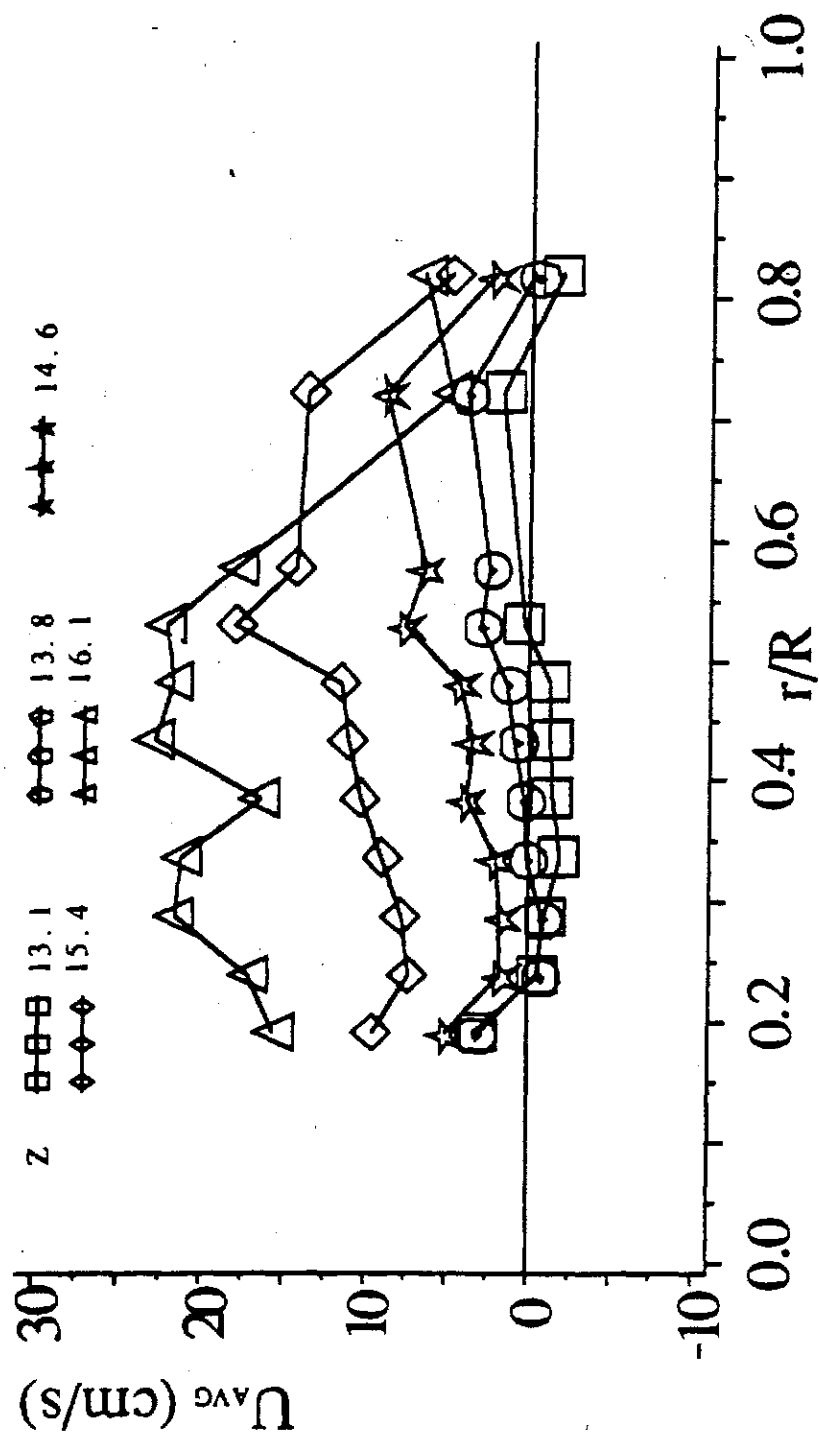


Figure 3.3.4 Average radial bubble velocity measurements in the top quarter of the bubble column.

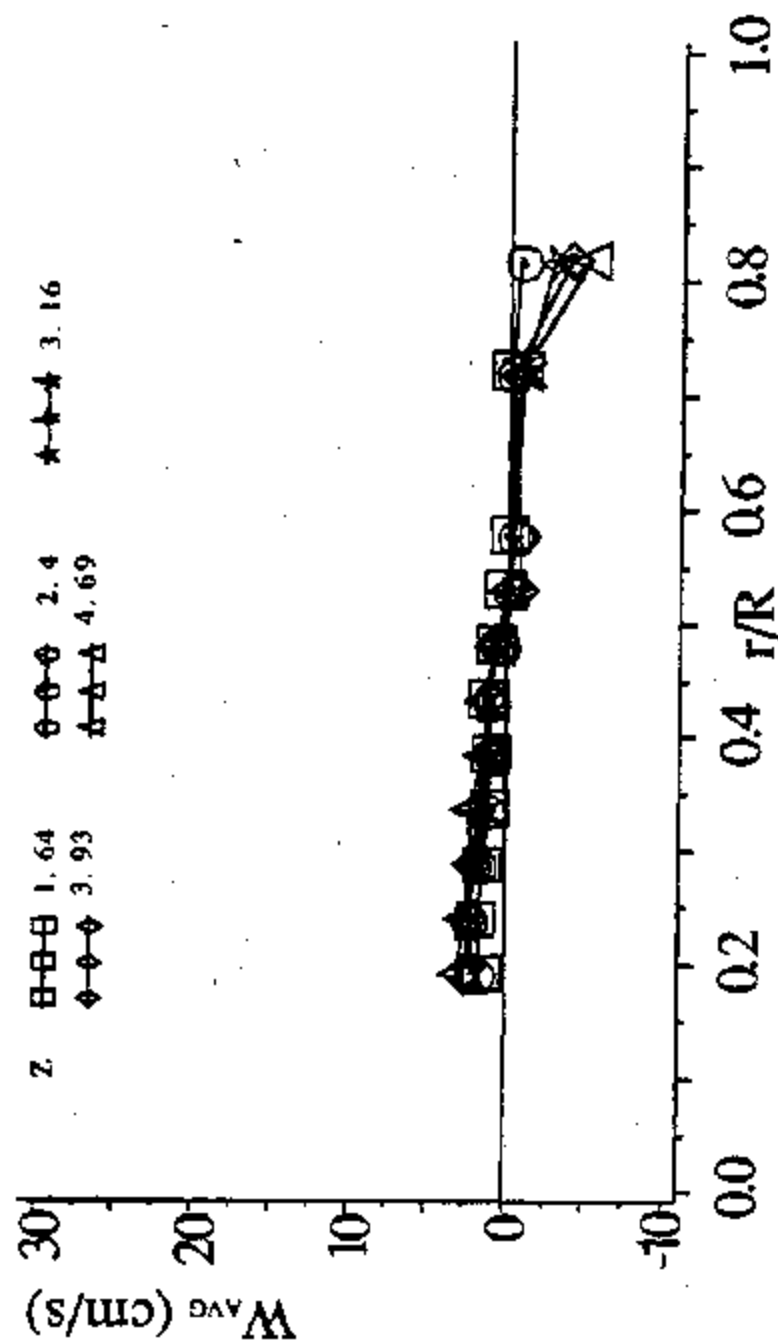


Figure 3.3.5 Average vertical bubble velocity measurements in the bottom quarter of the bubble column.

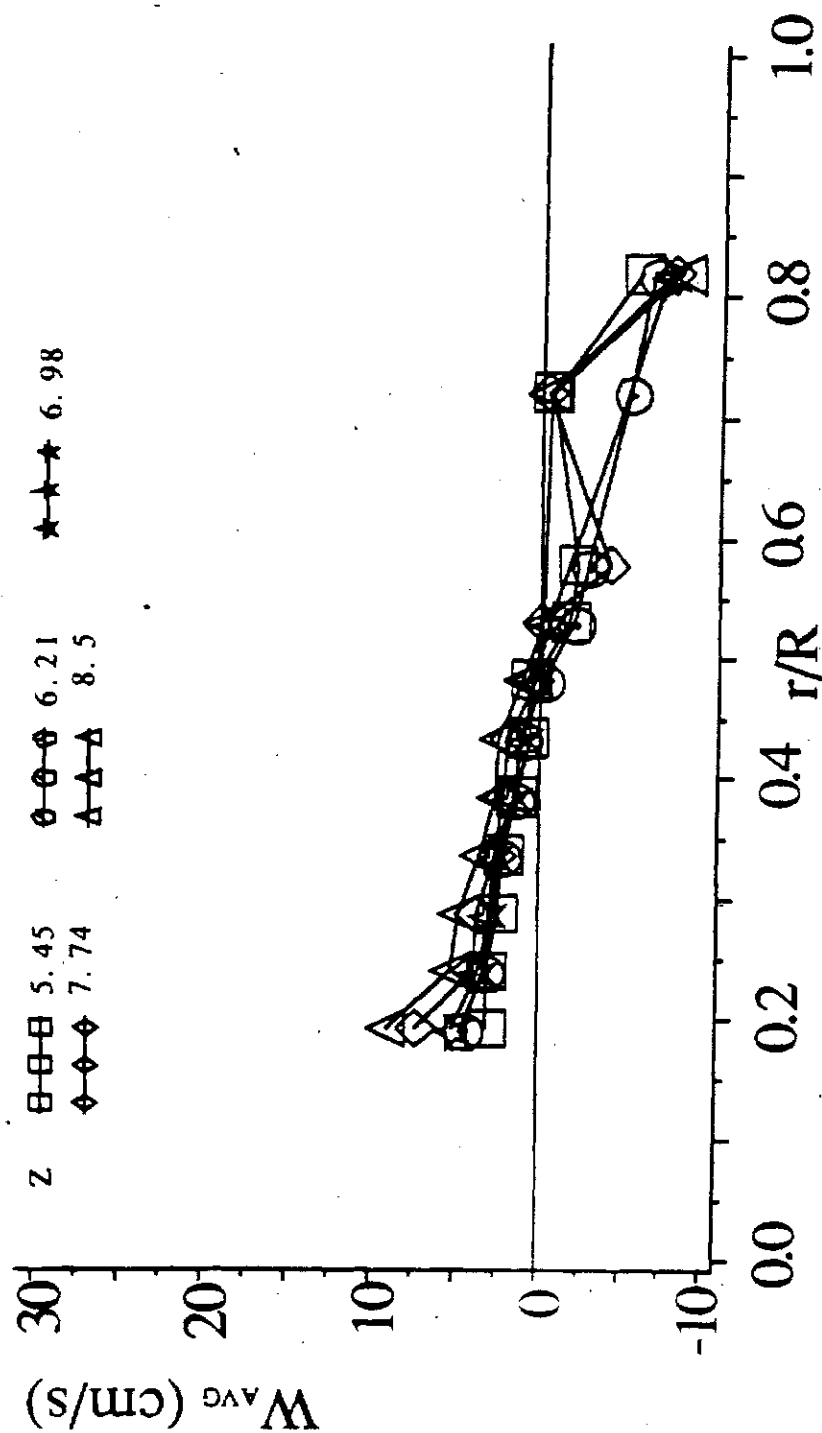


Figure 3.3.6 Average vertical bubble velocity measurements in the second quarter of the bubble column.

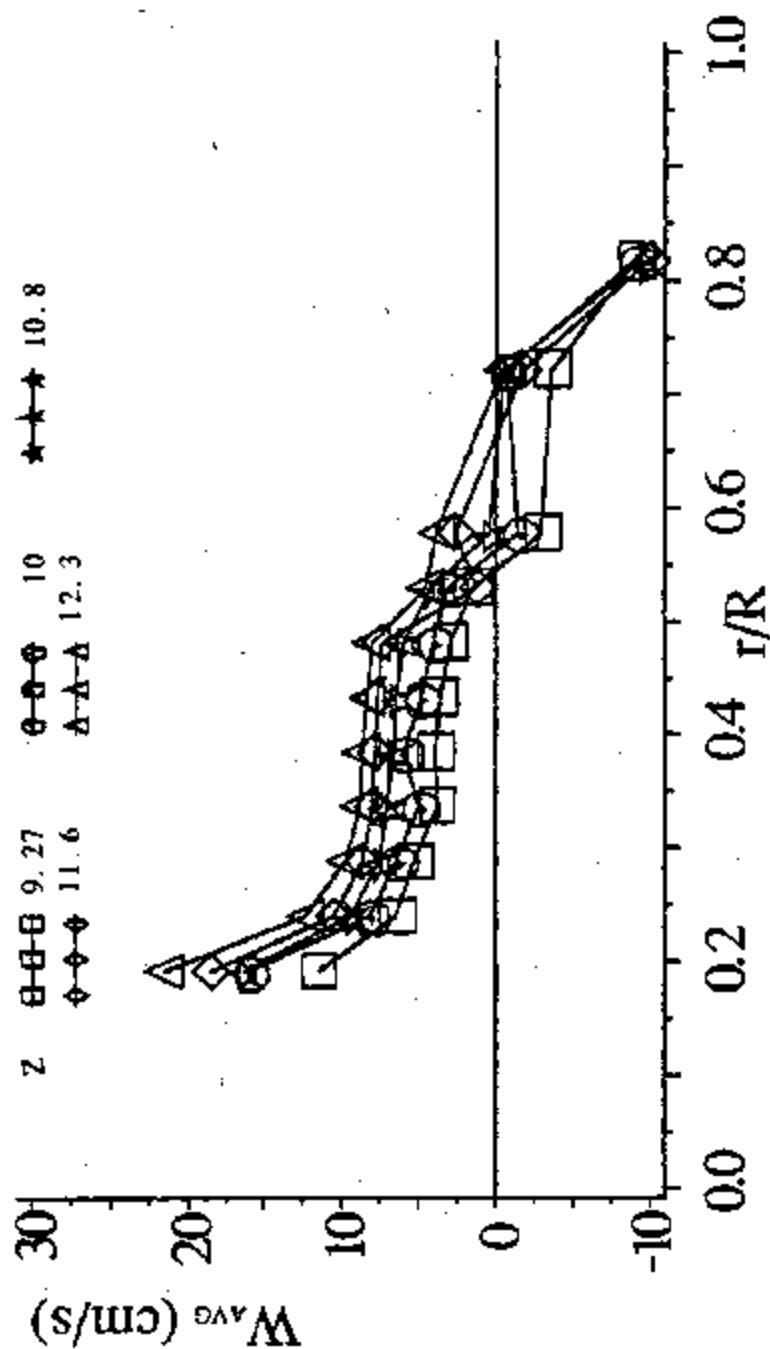


Figure 3.3.7 Average vertical bubble velocity measurements in the third quarter of the bubble column.

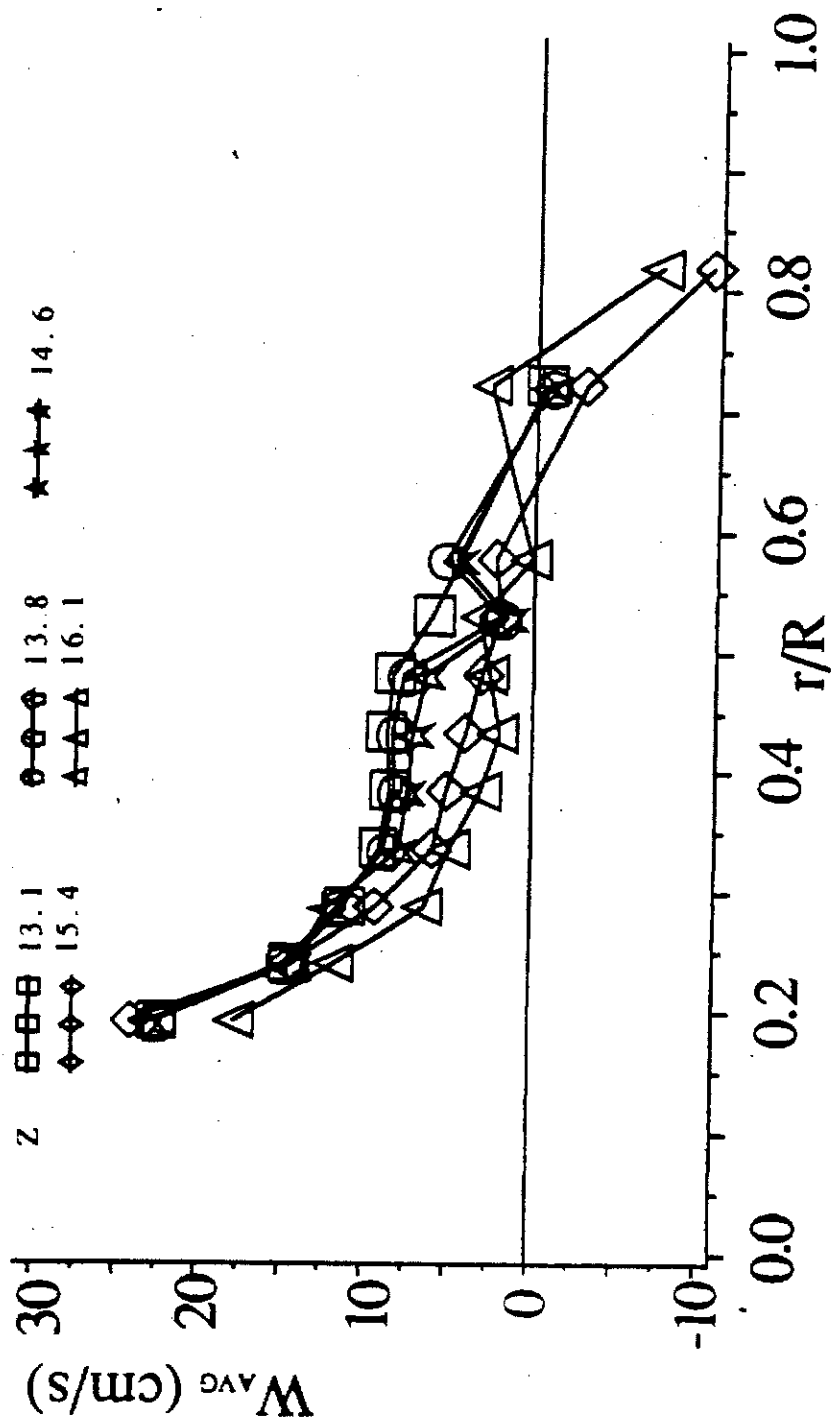


Figure 3.3.8 Average vertical bubble velocity measurements in the top quarter of the bubble column.

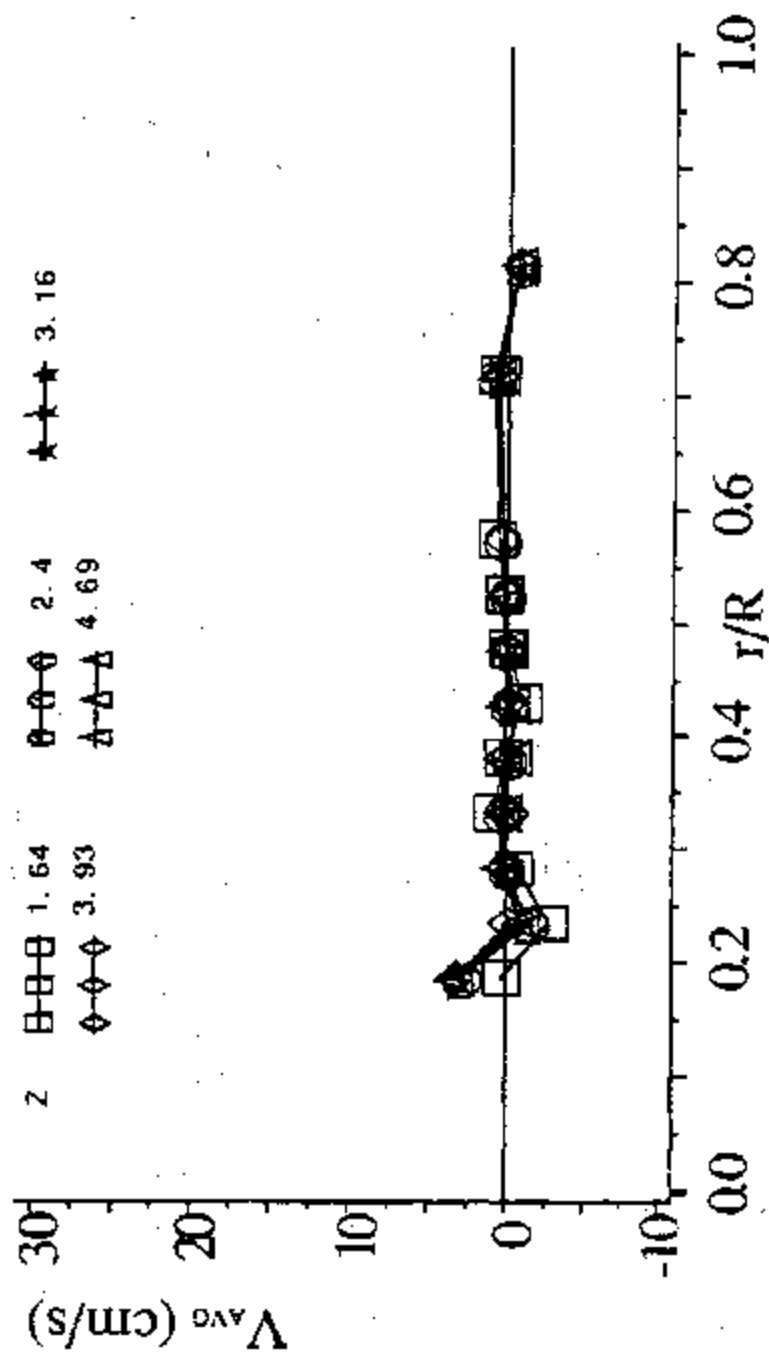


Figure 3.3.9 Average circumferential bubble velocity measurements in the bottom quarter of the bubble column.

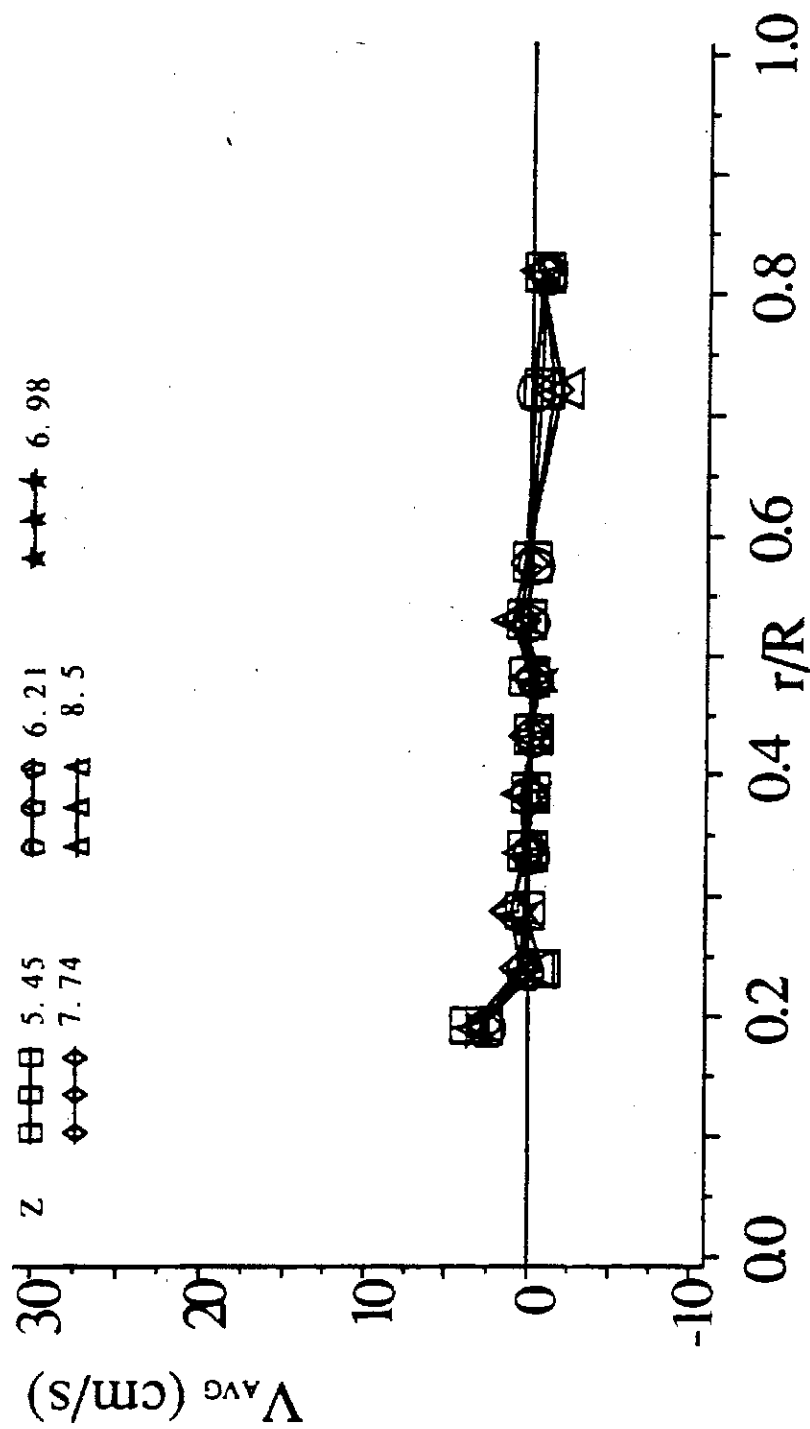


Figure 3.3.10 Average circumferential bubble velocity measurements in the second quarter of the bubble column.

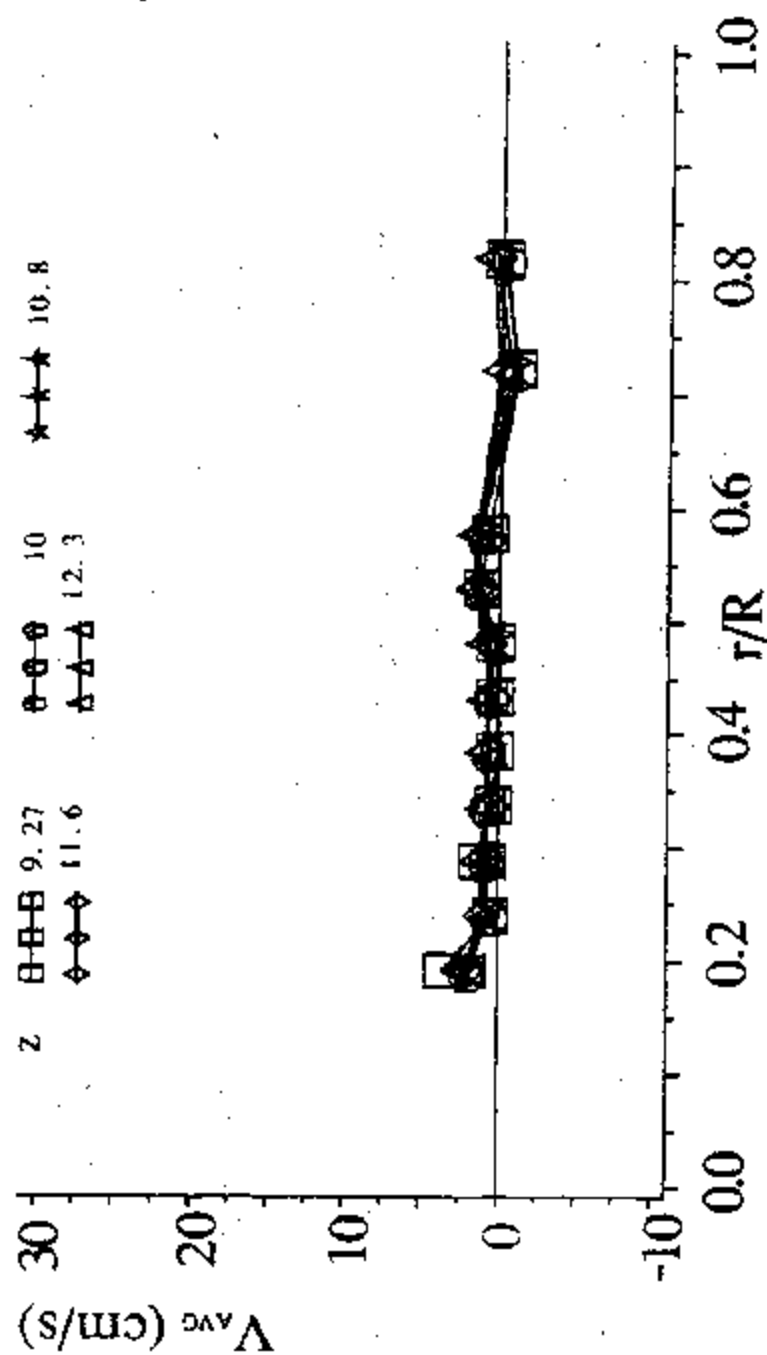


Figure 3.3.11 Average circumferential bubble velocity measurements in the third quarter of the bubble column.