

**PENGARUH EKSPANSI CEPAT ADIABATIS
TERHADAP PERUBAHAN SUHU GAS IDEAL**

ABSTRAK

Telah dilakukan penelitian terhadap perubahan suhu gas ideal yang mengalami ekspansi cepat secara adiabatis sebagai fungsi parameter kecepatan (ξ) dan parameter *stroke* (λ) secara numerik dengan menggunakan *Maple 9.5*. Hasil penelitian menunjukkan bahwa penurunan suhu semakin kecil kalau nilai ξ semakin besar serta nilai λ semakin kecil. Sebaliknya, penurunan suhu semakin besar kalau nilai ξ semakin kecil serta nilai λ semakin besar.

**EFFECT OF ADIABATIC RAPID EXPANSION
TO THE TEMPERATURE CHANGE OF AN IDEAL GAS**

ABSTRACT

Research on the temperature changes as functions of speed parameter (ξ) and *stroke* parameter (λ) for an ideal gas which undergoes an adiabatically rapid expansion have been performed numerically by using *Maple 9.5*. The results show that the reduction of the temperature to be very small when the value of ξ to be large with value of λ to be small. Otherwise, the reduction of the temperature to be very large when the value of ξ to be small with value of λ to be large.

