ub(T), ◦C = ◦C

ub(t), s = s

Zadanie 1.

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| LP | T, C | tśr, s | ua(tśr), s | u(tśr), s |
| 1 | 21,00(28) | 130,64(63) | 0,56 | 0,63 |
| 2 | 29,00(28) | 85,35(33) | 0,17 | 0,33 |
| 3 | 37,00(28) | 54,89(52) | 0,43 | 0,52 |
| 4 | 42,00(28) | 45,05(84) | 0,79 | 0,84 |
| 5 | 47,00(28) | 33,64(76) | 0,70 | 0,76 |

Zadanie 2,3.

**Niepewność pomiarowa:**

ub(t) = s

**Niepewność statystyczna:**Gdzie to odchylenie standardowe  
 to współczynnik Studenta Fishera. Dla N = 3 i α = 0.6826 wynosi

ua(tsr) =

**Niepewność standardowa:**

u(tsr) =

Zadanie 4,5.

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| LP | T, C | ρ, kg/m^3 | tśr, s | u(tśr), s | η, Pa\*s | u(η), Pa\*s |
| 1 | 21,00(28) | 878,8 | 130,64(63) | 0,63 | 1,1416(55) | 0,0055 |
| 2 | 29,00(28) | 871,8 | 85,35(33) | 0,33 | 0,7466(29) | 0,0029 |
| 3 | 37,00(28) | 868,3 | 54,89(52) | 0,52 | 0,4803(45) | 0,0045 |
| 4 | 42,00(28) | 864,8 | 45,05(84) | 0,84 | 0,3944(74) | 0,0074 |
| 5 | 47,00(28) | 861,2 | 33,64(76) | 0,76 | 0,2946(66) | 0,0066 |

Zadanie 6.

Zadanie 7.

Zadanie 8.

|  |  |
| --- | --- |
| a, K/mol | b, K/mol |
| 4857,038(11) | -16,38(36) |

Zadanie 9.

Zadanie 10.

U(W) =

U(W) = k

Zadanie 12.

1 J = 6,24\*1018 eV