|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| **12\_MANGANOMETRIE** |  |  |  |  |  |  |
| 1. **Stanovení koncentrace 0,002m KMnO4**
* titrace byla provedena pouze 1×

 * navážka K4[Fe(CN)3]·3H2O mN = **400,5 mg**

|  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- |
| V (ml) | E (V) | V (ml) | E (V) | V (ml) | E (V) | V (ml) | E (V) |
| 0,000 | 0,437 | 8,600 | 0,510 | 10,000 | 1,019 | 15,000 | 1,097 |
| 1,000 | 0,444 | 8,700 | 0,513 | 10,100 | 1,033 | 16,000 | 1,101 |
| 2,000 | 0,450 | 8,800 | 0,515 | 10,200 | 1,037 | 17,000 | 1,104 |
| 3,000 | 0,457 | 8,900 | 0,518 | 10,300 | 1,042 | 18,000 | 1,107 |
| 4,000 | 0,463 | 9,000 | 0,522 | 10,400 | 1,046 | 19,000 | 1,110 |
| 5,000 | 0,469 | 9,100 | 0,526 | 10,500 | 1,049 | 20,000 | 1,111 |
| 6,000 | 0,477 | 9,200 | 0,530 | 10,600 | 1,052 |   |   |
| 7,000 | 0,487 | 9,300 | 0,536 | 10,700 | 1,055 |   |   |
| 8,000 | 0,500 | 9,400 | 0,543 | 10,800 | 1,058 |   |   |
| 8,100 | 0,501 | 9,500 | 0,552 | 10,900 | 1,060 |   |   |
| 8,200 | 0,503 | 9,600 | 0,561 | 11,000 | 1,062 |   |   |
| 8,300 | 0,505 | 9,700 | 0,594 | 12,000 | 1,079 |   |   |
| 8,400 | 0,506 | 9,800 | 0,942 | 13,000 | 1,087 |   |   |
| 8,500 | 0,508 | 9,900 | 0,987 | 14,000 | 1,092 |   |   |

 |  | M (PbCl2) = 278,1 g/mol |  |  |  |  |
|  |  |  |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |  |  |
| *Obr. 1**Ukázka standardizace 0,002M KMnO4 pomocí programu LabView*1. **Stanovení koncentrace Fe2+ v neznámém vzorku**
* neznámý vzorek byl v 50 ml odměrné baňce doplněn po rysku dest.vodou
* titrace byla provedena pouze 1×
 |  |  |  |  |  |  |
|

|  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- |
| V (ml) | E (V) | V (ml) | E (V) | V (ml) | E (V) | V (ml) | E (V) |
| 0,000 | 0,534 | 8,000 | 0,548 | 9,700 | 0,572 | 11,400 | 1,097 |
| 1,000 | 0,535 | 8,100 | 0,549 | 9,800 | 0,577 | 11,500 | 1,099 |
| 2,000 | 0,536 | 8,200 | 0,550 | 9,900 | 0,592 | 11,600 | 1,100 |
| 3,000 | 0,537 | 8,300 | 0,550 | 10,000 | 0,645 | 11,700 | 1,102 |
| 4,000 | 0,539 | 8,400 | 0,551 | 10,100 | 0,964 | 11,800 | 1,104 |
| 5,000 | 0,541 | 8,500 | 0,551 | 10,200 | 1,029 | 11,900 | 1,110 |
| 6,000 | 0,543 | 8,600 | 0,552 | 10,300 | 1,043 | 12,000 | 1,111 |
| 7,000 | 0,546 | 8,700 | 0,553 | 10,400 | 1,051 | 13,000 | 1,115 |
| 7,100 | 0,546 | 8,800 | 0,554 | 10,500 | 1,065 | 14,000 | 1,119 |
| 7,200 | 0,546 | 8,900 | 0,554 | 10,600 | 1,073 | 15,000 | 1,123 |
| 7,300 | 0,546 | 9,000 | 0,556 | 10,700 | 1,079 | 16,000 | 1,125 |
| 7,400 | 0,546 | 9,100 | 0,557 | 10,800 | 1,082 | 17,000 | 1,128 |
| 7,500 | 0,547 | 9,200 | 0,558 | 10,900 | 1,086 | 18,000 | 1,131 |
| 7,600 | 0,547 | 9,300 | 0,560 | 11,000 | 1,090 | 19,000 | 1,133 |
| 7,700 | 0,548 | 9,400 | 0,563 | 11,100 | 1,091 | 20,000 | 1,134 |
| 7,800 | 0,548 | 9,500 | 0,565 | 11,200 | 1,093 | 21,000 | 1,136 |
| 7,900 | 0,548 | 9,600 | 0,568 | 11,300 | 1,095 | 22,000 | 1,139 |

*Obr. 2**Ukázka standardizace 0,002M KMnO4 pomocí programu LabView* |  |  |  |  |  |  |  |  |  |