Organic instrumental analytical techniques

***15 week***

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| **Week** | **Topic** | **Remark** |
| **1** | Description of the semester's topics; occupational health and safety education |  |
| **2** | Electroanalytical techniques (potentiometry) |  |
| **3** | Electroanalytical techniques (ionometry) |  |
| **4** | Electroanalytical techniques (conductometry) |  |
| **5** | Molecular spectroscopic techniques (UV-VIS) |  |
| **6** | Molecular spectroscopic techniques (UV-VIS) |  |
| **7** | Molecular spectroscopic techniques (IR) |  |
| **8** | Qualitative and quantitative applications of separation methods |  |
| **9** | Qualitative and quantitative applications of separation methods |  |
| **10** | Mass spectrometry |  |
| **11** | Mass spectrometry |  |
| **12** | Isolation, purification and analysis of different component from natural sources. |  |
| **13** | Isolation, purification and analysis of different component from natural sources. |  |
| **14** | Isolation, purification and analysis of different component from natural sources. |  |
| **15** | Isolation, purification and analysis of different component from natural sources. |  |

**Requirements:**

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| Requirements for participation in the sessions: | Attendance at the seminars is mandatory |
| The requirements of the half-yearly inspections: | Term grade. Based on the five mid-term tests |
| Credit assigned to the subject: | 3 |
| Grade: | Mid-term tests 50% + lab report 50% |
| Recommended literature: | J[ames W. Robinson](https://www.routledge.com/search?author=James%20W.%20Robinson), [Eileen M. Skelly Frame](https://www.routledge.com/search?author=Eileen%20M.%20Skelly%20Frame), [George M. Frame II](https://www.routledge.com/search?author=George%20M.%20Frame%20II): Instrumental Analytical ChemistryAn Introduction, ISBN 9781138196476 |
| Recommended websites: | LC-MS/MS Fundamentals: https://www.youtube.com/watch?v=poXapYZCrDA |