

**ANALYTICAL CHEMISTRY (BS-ADP 8<sup>th</sup>Semester)**

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|------------------------|--------------------------------------|
| <b>Module Code:</b>    | <b>Chem-468</b>                      |
| <b>Module title:</b>   | <b>Thermoanalysis Method</b>         |
| <b>Name of Scheme:</b> | <b>BS-ADP 8<sup>th</sup>Semester</b> |
| <b>Department:</b>     | <b>School of Chemistry</b>           |
| <b>Faculty:</b>        | <b>Science</b>                       |
| <b>Module Type:</b>    | <b>Compulsory</b>                    |
| <b>Module Rating:</b>  | <b>2 credits</b>                     |

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**OBJECTIVES:**

In This course, the students will be able to learn the use of laser spectroscopy for the purpose of analysis. Furthermore, the structural features responsible for the luminescence and The role of thermal methods in the analysis of various samples will also be studied.

**SYLLABUS OUTLINE:**

**1. Thermal Methods of Analysis**

General Principle, instrumentation, Application, Limitations; of these techniques

- TGA (thermogravimetric analysis),
- DTA (differential thermal analysis),
- DSC (differential scanning calorimetry),
- TT (thermometric titrations) and
- EGD (evolved gas detection)

**RECOMMENDED BOOKS:**

1. 1.Vogels's text book of Quantitative chemical analysis by J.mendham, RCDenny, JDBarnes, MJ KTHomas, Pearson education Ltd.