

## KIM 223EL

### INORGANIC CHEMISTRY LABORATORY

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**Manual:** İTÜ Chemistry Department, *Manual of Inorganic Chemistry Laboratory*, 2019.

**EXPERIMENT 1:** Some Metal Complexes of a Schiff's Base

**EXPERIMENT 2:** Simulation of Atomic and Molecular Orbitals

**EXPERIMENT 3:** VSEPR Theory and Symmetry

**EXPERIMENT 4:** Potassium bisoxalatocuprat(II) dihydrate: Preparation and Analysis

**EXPERIMENT 5:** Preparation and Investigation of Some Coordination Compounds

**EXPERIMENT 6:** Ammonium dichromate, Chromium(III) oxide, Potassium chromate and Potassium tetra peroxochromate(V)

**EXPERIMENT 7:** Transition Metal-carbon Bonds in Chemistry and Biology

**EXPERIMENT 8:** Metal Acetylacetonate Complexes: Preparation and Characterization

**EXPERIMENT 9:** Magnetic Susceptibility

**EXPERIMENT 10:** Spectrophotometric Determination of the Composition of a Coordination Complex in Solution

Laboratory activities: (30%)

Midterm examination: (30%)

Final examination: (40%)

**20 February – 22 February 2019:** Start of experimental procedures (First week)

**10 April 2019( Week 7):** Midterm examination (Two groups at the same time) (17:30)

*Your group number is the same as your number of the experiment you will perform in the first week. In the next week, the following experiment will be done. Group lists will be hanged onto the laboratory doors as well as displayed in the Chemistry Department webpage. The student must be prepared for the quiz before the lab session every week; failure to pass this quiz will lead to miss a laboratory session.*

***Students are required to have at least 30 out of 100 points as an average of midterm and lab work. Otherwise, the student will be given VF.***