### **BIOLOGICAL FRAMEWORKS FOR ENGINEERS**

# Session #6 [nm: Protein Function]

### General Objectives:

- ✓ Discuss general functions of proteins
- ✓ Overview of protein structures with respect to their function

# **Central Framework:**

✓ A protein is has specific binding domains that underlie their functional response and define its structural, scaffold, transport, regulatory, and motor activities.

### **Interactive Activity:**

✓ Worksheet on the equilibrium chemistry of protein-ligand binding.

### <u>Session Outline:</u>

- I. Binding
- II. Protein Functions

#### Enzymes

# **Structures**

# <u>Signaling</u>

| <u>Regulation</u>          |
|----------------------------|
| <u>Transport</u>           |
| <u>Motor proteins</u>      |
| III. Dissociation Constant |
| Affinity                   |
| <u>Comparisons</u>         |