**Redox Reactions**

1. What is transferred in “Redox Reaction”?

2. What is “Reduction”?

3. What is “Oxidation”?

4. In Covalent Bond, What is shared?

5. To understand “Oxidation States”, there are four rules. What are they?

**Lithium-Ion Battery**

1. Explain the structure of the electrodes of Li-Ion Battery. (4:43)

2. What happens in Anode of the battery?

3. What happens in Cathode of the battery?

4. What is the “Rocking Chair” mechanism of the Li-Ion Battery?

5. What improvements are necessary for the lithium-ion battery? (7:12)

6. Briefly Summarize the battery industry (8:15)

7. Why Si/C composites are the industrial solution (ex. Tesla) as battery material?

(11:17)

8. Summarize the battery manufacturing process.

9. Explain the C-rate and Amp-hours (16:23)

10. How do we make better batteries? (20:18)