

## **Universitäts- und Landesbibliothek Tirol**

### **Handwörterbuch des chemischen Theils der Mineralogie**

N - Z

**Rammelsberg, Carl F.**

**Berlin, 1841**

Titelblatt

# HANDWÖRTERBUCH

DES CHEMISCHEN THEILS

DER

# MINERALOGIE

VON

C. F. RAMMELSBERG,

DOCTOR DER PHILOSOPHIE, PRIVATDOCENT AN DER UNIVERSITÄT ZU BERLIN,  
MITGLIED DER GESELLSCHAFT FÜR ERDKUNDE IN BERLIN, EHRENMITGLIED  
DER GESELLSCHAFT NATURFORSCHENDER FREUNDE DASELBST, UND DES APO-  
THEKERVEREINS IM NÖRDLICHEN DEUTSCHLAND, CORRESPONDIRENDEM MIT-  
GLIED DES NATURWISSENSCHAFTLICHEN VEREINS DES HARZES.

---

ZWEITE ABTHEILUNG.

N — Z.

---

BERLIN, 1841.

VERLAG VON C. G. LÜDERITZ.

THE UNIVERSITY OF CHICAGO

PHYSICS DEPARTMENT

# PHYSICS 311

## LECTURE 10

Electromagnetic Induction  
Faraday's Law  
Motional EMF  
Lenz's Law  
Energy in Induced Fields

## PROBLEMS

1. A rectangular loop of wire with length  $l$  and width  $w$  is placed in a uniform magnetic field  $B$  directed into the page. The loop is pulled to the right with a constant velocity  $v$ . Calculate the induced EMF and current in the loop.

2. A rod of length  $l$  is pulled to the right with a constant velocity  $v$  on two parallel rails connected by a resistor  $R$ . The rails are in a uniform magnetic field  $B$  directed into the page. Calculate the power dissipated in the resistor.

## ANSWERS

1.  $\mathcal{E} = Blv$ ,  $I = \frac{Blv}{R}$