



# ASM Student Materials Camp



Are you interested in science, math, chemistry, and physics?

Did you ever wonder how materials are structured or fail?

Do you know about careers in materials engineering?

**Apply for a chance to get an all expenses paid trip to a materials camp where you can have fun learning about materials engineering!**

## What is ASM Materials Camp?

- ▣ An academic camp utilizing hands-on learning principles of applied math, physics, chemistry, and basic physics.
- ▣ A very unique team-based, intensive problem solving science experience under the direction of a distinguished world-class faculty, “Materials Mentor”.
- ▣ Combination of mini-demonstrations, field trips with extensive involvement in unique laboratory facilities to actively explore materials science & engineering principles.

## ▣ 2010 Student Materials Camps

### Location

### Dates

Cleveland, OH

ASM Headquarters

August 8-14

Raleigh, NC

North Carolina State University

TBD

Rolla, MO

Missouri University of Science & Technology

July 25-30

State College, PA

Penn State University

July 4-9

## Who should attend?

- ▣ Students entering Grade 11 or 12 in high school in the Fall 2010 semester.
- ▣ Highly motivated inquisitive learners with math and science aptitude, or a strong desire to learn about materials.

## What does it cost to attend?

- ▣ Students receive FREE housing (for residential camps only), meals, tuition, entertainment and knowledge.
- ▣ The local ASM Chapter of Edmonton will hold a city wide competition to send 1-2 students and cover all travel expenses to any residential camp of the students’ choosing (see application form on reverse).

## How do students apply?

- ▣ Applications are available on the reverse, and are due by March 17, 2010.
- ▣ Required information includes school transcript and a maximum of two letters of recommendation.
- ▣ Personal essay (100 words or more) expressing “why you want to attend the ASM Materials Camp.

## How are students selected?

- ▣ This is a competitive application process. Students must have basic knowledge of algebra, chemistry, and physics and describe why they want to learn more about engineering and materials science as a possible college major and career.
- ▣ Experienced practicing engineers review each application to select the “best and brightest”, highly motivated students.
- ▣ Students must have a strong interest in applied science.
- ▣ Prior participation in science fairs is helpful to show interest, but certainly not required.

## What will students actually do at Materials Camp?

- ▣ Have fun. Our number one goal is to make applied science an exciting, fun experience.
- ▣ Solve a technical problem. Using the “Failure analysis” exploration model, students work in small groups and investigate the failure of a man-made material to perform its intended function.
- ▣ Learn to use state-of-the-art research equipment in an engineering laboratory under the guidance of experts.

## Where can I get additional information?

- ▣ Visit: [www.asmfoundation.org](http://www.asmfoundation.org)
- ▣ Contact Dr. John Nychka, Edmonton ASM Chapter, Student Camp Coordinator, Tel: 780-492-4796, FAX 780-492-2881, email: [jnychka@ualberta.ca](mailto:jnychka@ualberta.ca)

