



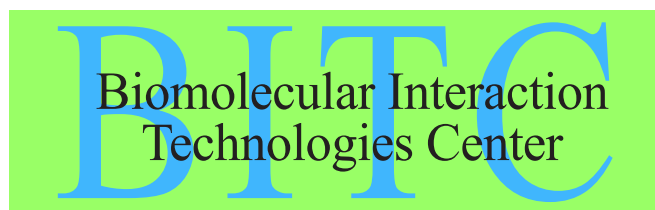
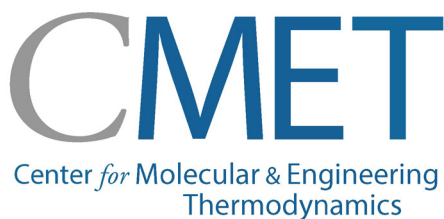
# 2015 BIOPHYSICAL & COLLOIDAL CHARACTERIZATION WORKSHOP

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**October 5 - 7, 2015**

Allan P. Colburn Laboratory  
University of Delaware, Newark, DE

Co-sponsored by the Center for Molecular and Engineering Thermodynamics &  
the Biomolecular Interaction Technologies Center



**When:** October 5-7, 2015

**Location:** Colburn Laboratory, University of Delaware, 150 Academy Street, Newark DE

**Overview:** the workshop will consist of short courses and hands-on demonstrations of the principles and commercial technologies for characterization of protein solutions and related colloidal systems. The particular focus areas for the 2015 Workshop will be scattering, rheology, electrophoresis, and Raman spectroscopy / microscopy methods. The target audience includes industrial scientists and engineers, graduate students, and postdocs interesting in hands on experience as well as the principles underlying these techniques, and for those who are evaluating different technologies for use in their own laboratory. Short courses will include principles, applications, and examples relevant to the biotechnology industries, and will be taught by experts from industry and academia.

**Schedule:**

**Day 1: Oct. 5**

2nd Floor Lobby, Colburn Laboratory  
12:00 – 12:50 pm Registration  
Rm. 366, 3rd Floor, Colburn Laboratory  
12:50 – 1:00 pm Welcome and opening remarks (Chris Roberts, U. Delaware)  
1:00 – 2:15 pm Short course: small-angle scattering (Yun Liu, NIST)  
2:15 – 2:30 pm Break  
2:30 – 3:45 pm Short course: dynamic light scattering (Chris Roberts, U. Delaware)  
3:45 – 4:00 pm Break  
Lab 135, 1st Floor, Colburn Laboratory  
4:00 – 5:00 pm Lab Session # 1: (i) Static light scattering OR (ii) Dynamic light scattering

**Day 2: Oct. 6**

Rm. 366, 3rd Floor, Colburn Laboratory  
8:30 – 9:00 am Breakfast  
9:00 – 10:30 am Short course: protein electrophoresis (Tom Laue, U. New Hampshire)  
10:30 – 10:45 am Break  
Lab 135, 1st Floor, Colburn Laboratory  
10:45 – 11:45 am Lab Session #2: (i) Static light scattering, OR (ii) Dynamic light scattering, OR (iii) Electrophoresis  
11:45 am Walk to Perkins Center  
Perkins Center, 325 Academy Street  
12:00 – 1:00 pm Lunch in Gallery  
Rm. 366, 3rd Floor, Colburn Laboratory  
1:15 – 2:30 pm Short course: macro- and micro-rheology (Eric Furst, U. Delaware)  
Labs 135 & 136, 1st Floor, Colburn Laboratory  
2:30 – 3:30 pm Lab Session #3: (i) Static light scattering, OR (ii) Dynamic light scattering, OR (iii) Electrophoresis, OR (iv) Rheology  
3:40 – 4:40 pm Lab Session #4: (i) Static light scattering, OR (ii) Dynamic light scattering, OR (iii) Electrophoresis, OR (iv) Rheology  
4:50 – 5:50 pm Lab Session #5: (i) Static light scattering, OR (ii) Dynamic light scattering, OR (iii) Electrophoresis, OR (iv) Rheology  
East Lounge, Perkins Center  
6:00 – 7:00 pm Reception

**Day 3: Oct. 7**

Rm. 366, 3rd Floor, Colburn Laboratory  
8:30 am Breakfast  
8:45 – 10:00 am Short course: Raman spectroscopy (Neil Lewis, Malvern Instruments)  
Lab 136, 1st Floor, Colburn Laboratory  
10:00 – 11:00 am Lab Session #6: Raman spectroscopy and Microscopy  
11:00 – 12:00 pm Lab Session #7: Raman spectroscopy and Microscopy

**Registration fee:** \$600

The registration fee covers all lectures, laboratory demonstrations, course materials, refreshments and lunch (day 2).