#### **Coating Science &**

**Technology at Cal Poly** California Polytechnic State University, San Luis Obispo, is one of the 23 campuses of the California State University system. Cal Poly enrolls over 20,000 students and is nationally recognized for the excellence of its programs in architecture, agriculture, engineering, and the sciences. Cal Poly's Polymers and Coatings program, an integral part of the Chemistry and Biochemistry Department of the College of Science and Mathematics, offers both an **Undergraduate Concentration** and a Masters Degree in Polymers and Coatings Science. The Western Coatings Technology Center is the key interphase between Cal Poly and the coating industry.

#### **Short Course Overview**

Cal Poly's summer short course on polymers and coatings brings together academic and industrial experts in the field. The one-week course covers many aspects of coating technology with emphasis on liquid coatings, both waterborne and solvent-based. Participants benefit from discussions of a wide range of topics by industry and academic experts, including VOC and air quality aspects of coatings agencies. Participants are expected to have had some exposure to the coatings field, along with working knowledge in chemistry and other sciences.

For More Information:
Visit wctc.calpoly.edu

# CAL POLY

SAN LUIS OBISPO

# **Polymers & Coatings**

Summer Short Course

July 30 - August 3, 2018

Kenneth N Edwards Western Coatings Technology Center California Polytechnic State University San Luis Obispo, CA 93407 | (805) 756-2395 pandc@calpoly.edu | wctc.calpoly.edu



#### <u>Agenda</u>

### Monday July 30 - Friday August 3, 2018

- -Overview of course, review of basic chemistry
- -Introduction to polymer chemistry
- -Overview of VOC analysis
- -Physical polymer chemistry
- -Polymer analysis
- -Organic polymer chemistry
- -Coatings formulation
- -Coatings properties and testing
- -Coatings rheology and application aspects
- -Discussion of lab results

#### **Lab Sessions**

- -Solution and emulsion polymerization, GPC molecular weight analysis, viscosity molecular weight analysis.
- -Paint formulation from commercial latex and student latex, paint testing, thermal analysis.
- -Formulate architectural coatings, two-component urethane, epoxy coatings, test coatings.
- -VOC analysis by ASTM GC-MS method.

#### **Travel & Accommodations**

San Luis Obispo is located in California's Central Coast region, 200 miles north of Los Angeles and 230 miles south of San Francisco. Participants who wish to drive from the Los Angeles or San Francisco areas may take Route 101. All major airlines offer services to San Luis Obispo Airport with connecting flights from Los Angeles, San Francisco, and Phoenix, Denver, and Seattle. The San Luis Obispo Chamber of Commerce website (www.visitslo.com) contains information for local hotels. Lodging is not included in the program fee.



#### **Course Fees 2018\***

Before 5:00 PM on June 29, 2018: **\$1695**After 5:00 PM on June 29, 2018: **\$1795** 

# Participants can register online at, wctc.calpoly.edu.

\*Program fee includes handout hard copies, electronic copies of the course material, parking permits, and lunch, Monday-Thursday.

### **Instructors**

- Dr. Gary Dombrowsky, Dow Chemical
- Dr. Ray Fernando, Cal Poly State University
- Dr. Dane Jones, Cal Poly State University
- Mr. Stuart Lipskin, BYK Additives Company
- Dr. Patrick Lutz, EPS/Color Corporation
- Mr. David Mukoda, Chemours Corporation
- Mr. Scott Van Remortel, Unimin Corporation
- Mr. Don Ricks, Evonik Industries
- Dr. Erik Sapper, Cal Poly State University
- Dr. Todd Williams, Covestro Corporation
- Dr. Shanju Zhang, Cal Poly State University



## **Important Information**

The Cal Poly Kenneth N Edwards Western Coatings Technology Center in cooperation with Cal Poly Conference & Event Planning Department offers this program to professionals in the field of polymers and coatings. The program begins on Monday, July 30<sup>th</sup> at 8:00 am, and ends on Friday, August 3<sup>rd</sup> by 12:00 noon.

The early registration period ends at 5:00PM on Friday, June 29, 2018. Registrations received after this deadline will be charged the full amount of \$1795.

Cancellation of enrollment must be received in writing. To receive a full refund, cancellation request must be received no later than June 29, 2018. No refunds will be issued after that date. A \$125.00 administration fee is assessed for processing refunds. Questions concerning registration or refunds should be directed to Cal Poly Conference & Event Planning at (805) 756-7600, FAX (805) 756-7601.

California Polytechnic State University is an equal opportunity institution. Individuals with disabilities requiring specific accommodations are encouraged to notify the Western Coatings Technology Center in advance of this program.