Monday, June 3, 2024
7:00 A.M. – 8:00 A.M. COURSE REGISTRATION
Rauch Business Center 291/292/293
8:00 A.M. – 9:30 A.M. Lecture 1
Free Radical Polymerization Mechanisms and Kinetics (F. Joseph Schork)
9:30 A.M. – 9:40 A.M. Coffee Break
9:40 A.M. – 11:10 A.M. Lecture 2
Emulsion Polymerization Mechanisms and Kinetics (F. Joseph Schork)
11:20 A.M. – 12:50 P.M. Lecture 3
Branching and Grafting in Emulsion Polymerizations (Peter A. Lovell)
12:50 P.M. – 1:50 P.M. Lunch
Rauch Business Center 291/292/293
1:50 P.M. – 3:20 P.M. Lecture 4
The Role of Surfactants in Emulsion Polymerization and Kinetics (Mahmoud S. El-Aasser)
3:20 P.M. – 3:30 P.M. Coffee Break
3:30 P.M. – 5:00 P.M. Lecture 5
Semi-Continuous Emulsion Polymerization and Structured Latexes (Michael F. Cunningham)

Tuesday, June 4, 2024
8:00 A.M. – 9:30 A.M. Lecture 6
Colloidal Stabilization and Destabilization Mechanisms of Latex Systems (Mohamed S. El-Aasser)
9:30 A.M. – 9:40 A.M. Coffee Break
9:40 A.M. – 11:10 A.M. Lecture 7
Characterization of Latex Particle Size and Particle Size Distribution: Experimental Methods (Andrew Hollingsworth)
11:10 A.M. – 11:20 A.M. Coffee Break
11:20 A.M. – 12:50 P.M. Lecture 8
Correlation Between Colloidal Structure and Application Properties of Acrylic Latexes (Bernd Beck)
12:50 P.M. – 1:50 P.M. Lunch
Rauch Business Center 291/292/293
1:50 P.M. – 3:20 P.M. Lecture 9
Inverse Emulsion Polymerization (Donna Visioli)
3:20 P.M. – 3:30 P.M. Coffee Break
3:30 P.M. – 5:00 P.M. Lecture 10
Latex Film Formation (Peter A. Lovell)

Wednesday, June 5, 2024
8:00 A.M. – 9:30 A.M. Lecture 11
Miniemulsions: Latex Systems via Polymerization in Monomer Droplets and Direct Emulsification of Polymer Solutions (Mohamed S. El-Aasser)
9:30 A.M. – 9:40 A.M. Coffee Break
9:40 A.M. – 11:10 A.M. Lecture 12
Living Radical Polymerization and Advances in Future directions for Emulsion Polymers/Polymer Colloids (Michael F. Cunningham)
11:20 A.M. – 12:50 P.M. Lecture 13
Latex Rheology (Cesar A. Silvestri)
12:50 P.M. – 1:50 P.M. Lunch
Rauch Business Center 291/292/293
1:50 P.M. – 3:20 P.M. Lecture 14
Adhesives (Bernd Beck)
3:20 P.M. – 3:30 P.M. Coffee Break
3:30 P.M. – 5:10 P.M. Lecture 15
Reduction of Residual Monomers (Donna Visioli)
5:10 P.M. – 5:20 P.M. Coffee Break
5:20 P.M. – 7:00 P.M. Lecture 16
Acrylic Latexes  (Bernd Reck)
7:00 P.M. – 8:00 P.M. Lecture 17
Characterization and Applications (Mohamed S. El-Aasser)

Wednesday, June 5, 2024 continued
1:50 P.M. – 3:20 P.M. Lecture 14
Coatings: Material and Formulation Science (Christopher M. Miller)
3:20 P.M. – 3:30 P.M. Coffee Break
3:30 P.M. – 5:00 P.M. Lecture 15
Nonaqueous Colloids: Physics and Applications (Andrew Hollingsworth)

Thursday, June 6, 2024
8:00 A.M. – 10:00 A.M. Lecture 16
Fundamentals and Advancement of Waterborne Epoxy and Polyurethanes (Bedri Erdem)
10:00 A.M. – 10:10 A.M. Coffee Break
10:10 A.M. – 11:35 A.M. Lecture 17
Waterborne Pressure Sensitive Adhesives (Ying-Yuh Lu)
11:35 A.M. – 11:45 A.M. Coffee Break
11:45 A.M. – 1:00 P.M. Lecture 18
Recent Patent Activity Involving Emulsion Polymers and Reduction of Residual Monomers (Donna Visioli)
1:00 P.M. – 2:00 P.M. Picnic Lunch
RBC Courtyard
2:00 P.M. – 3:30 P.M. Lecture 19
Film Formation and Film Properties of Acrylic Latexes for Coatings and Adhesives (Bernd Beck)
3:30 P.M. – 3:40 P.M. Coffee Break
3:40 P.M. – 5:10 P.M. Lecture 20
Water-Borne Soft-Soft Nanocomposites: Principles and Application Case Studies (Peter Lovell)
7:15 P.M. – 9:15 P.M. Lecture 21
Question & Answer Session (lecturers and Participants)

Friday, June 7, 2024
8:00 A.M. – 9:15 A.M. Lecture 22
Sensors and Controls for Emulsion Polymerization Reactors (F Joseph Schork)
9:15 A.M. – 9:20 A.M. Coffee Break
9:20 A.M. – 10:35 P.M. Lecture 23
Reactor Design and Scale-up in Emulsion Polymerization (Michael F. Cunningham)
10:35 A.M. – 10:45 A.M. Coffee Break
10:45 A.M. – 12:00 P.M. Lecture 24
Monodisperse Latex Particles – Preparation, Surface Modification, Characterization and Applications (Mohamed S. El-Aasser)
12:00 P.M. – 1:15 P.M. Lunch
Nonaqueous Colloids – Fundamentals and Future Directions (Mohamed S. El-Aasser)
1:15 P.M. – 3:00 P.M. Lecture 25
Nonaqueous Colloids: Synthesis and Characterization (Bedri Erdem)
3:00 P.M. – 3:10 P.M. Coffee Break
3:10 P.M. – 5:00 P.M. Lecture 26
Recent Advances in Nonaqueous Colloids (Bedri Erdem)
5:00 P.M. – 5:15 P.M. Coffee Break
5:15 P.M. – 7:15 P.M. Lecture 27
Recent Advances in Emulsion Polymerization (Bedri Erdem)

Register Online at:
http://wordpress.lehigh.edu/inadvemu/
Registration, Housing & Parking: Total Cost
University Housing Fees ($55/room/night)
Number of Days: Departure Date: Number of Nights: Roommate Request:
University Parking for people living off campus: Zoeller Garage** (June 5-7, 2024 as daily fee available)
Parking Total Costs ($ = # of days x $15/car/day)
University Housing Fees ($55/person/night)
Number of Days: Departure Date:
Payment Options
Check will be sent with a copy of this registration form (Please make check payable to: Lehigh University)
Please send an invoice to: NOTE: To pay by credit card visit course website:
http://wordpress.lehigh.edu/inadvemu/
Refund requests received before May 1, 2024 will be honored in full. After May 1st, there will be a processing charge of $900.00 deducted for meeting cancellation and a processing charge of one night ($62.00) will be deducted for housing cancellations. Please note: Individuals who cancel and are assessed the $900.00 cancellation fee will be provided with a set of the Short Course Notes.
We would greatly appreciate it if you could check the box below indicating how you learned about this Short Course. Thank you very much for your input.
• A Colleague in my company
• Previous Attendee
• Trade Association
• Other (please indicate source):
“Advances in Emulsion Polymerization and Latex Technology”
June 3-7, 2024
Course Organizer
DR. MOHAMED S. EL-AASSER
Professor Emeritus
Department of Chemical and Biomolecular Engineering
Course Design
The course is an in-depth study of the synthesis, characterization, and properties of high polymer latexes. The subject matter includes a balance of theory and applications as well as a balance between chemical and physical problems. Lectures will be given by leading academic and industrial scientists. Lectures will begin with introductory material and reviews, and will progress through recent research results and industrial application.

Location and Time
Rauch Business Center | Lehigh University
621 Taylor Street | Bethlehem, Pennsylvania 18015

Registration/Check In: Monday, June 3rd
621 Taylor Street | Bethlehem, Pennsylvania 18015
Rauch Business Center | Lehigh University
Location and Time

Fees
$1,800 for the entire five (5) days or $900 per day for any portion of the course attended. Some discounts are available; see the course registration section for details.
Fees cover registration, a set of notes, five (5) days of beverages at break, and lunch provided for four (4) days.

Payment Options:
- Credit Card Payments can be completed on line. Please go to the following website to register for the course, university housing, and university parking to pay by credit card (VISA, Master Charge, or American Express). http://wordpress.lehigh.edu/inadvmus/
- Checks payable to Lehigh University should accompany application, which can be downloaded at the following website or using the brochure registration form. http://wordpress.lehigh.edu/inadvmus/

• If you require an invoice prior to making payment, please send your registration form for the course, university housing, and university parking to Debra Nyby at debra.nyby@lehigh.edu and an invoice will be sent to you.

Refund requests received before May 1, 2024 will be honored in full. After May 1st there will be a processing charge of $900 deducted for meeting cancellation and a processing charge of one night ($65.00) for housing cancellations. Please note: Individuals who cancel and are assessed the $900.00 cancellation fee will be provided with a set of the Short Course Notes.

Transportation an Locale
Bethlehem is located in the heart of the Lehigh Valley about 50 miles north of Philadelphia and 80 miles west of New York City.
It is easily accessible by plane via the Lehigh Valley International Airport (formerly known as the ABE, Allentown-Bethlehem-Easton Airport), by car via the east-west Route 78 (22) and the north-south Northeast Turnpike Extension (I-476) and Routes 309 and 378, or by bus from New York City (Port Authority Terminal)

Driving Instructions to Rauch Business Center, Lehigh University: https://www1.lehigh.edu/about/maps-directions/rauch-business-center
Driving Instructions to Farrington Square (on campus housing) http://www1.lehigh.edu/campusmap/map?location=Campus%20Square%20B4

Accommodations
Modern air-conditioned University dormitories are available within several blocks of the conference site. Linens are provided. Single occupants will share a suite (living room and bathroom) with two (2) other course participants. Each person will have a private bedroom. Please see the following site for a description of the Farrington Square dormitories:
http://www.lehigh.edu/housing/residencially/square/farringsquareresidence.aspx
A processing charge ($65.00) of one night will be deducted for housing cancellations after May 1, 2024.
A Continental Breakfast will be available to course participants at Rauch Business Center on June 3rd only. Beverages only will be provided with breakfast throughout the day. Lunches from Monday to Thursday are included.

Hotels/motels are for the most part far from campus and will require transportation. Hotel/motel reservations should be made by contacting the hotel/motel directly.

Please be sure to mention you are coming to Lehigh University and request the Lehigh University rate.

Comfort Suites*
120 West Third Street, Bethlehem, PA; 484-379-0927
Holiday Inn Express Hotel & Suites
2201 Cherry Lane, Bethlehem, PA; 610-638-6110

Historic Hotel Bethlehem
437 Main Street, Bethlehem, PA; 610-625-5000
Hyatt Place
45 West North Street, Bethlehem, PA; 610-625-0500

*Only hotel within walking distance of the university.

Lectors
Michael Cunningham, Queen’s University, CANADA
Mohamed El-Aasser, Lehigh University, USA
Bedri Erdem, Aust-Olesum Corporation, USA
Andy Hollingsworth, New York University, USA
Peter Lovell, University of Manchester, UK
Ying-Yuh Lu, 3M Company (retired), USA
Christopher Miller, Arkema, USA
Bernd Reck, BASF, Germany
Joseph Schork, Georgia Institute of Technology, USA
Cesar Silebi, Lehigh University, USA
Donna Visioli, DuPont (retired), USA

Course Registration Form
Participants may reserve a space for the Short Course by completing the form, and either:
(1) Mail the registration form in, along with a check payable to: Lehigh University
Ms. Debra Hartzeli Nyby
Lehigh University
111 Research Drive
Bethlehem, PA 18015-4732 USA
Telephone: (610) 758-3607
e-mail: debra.nyby@lehigh.edu

OR (2) Completing the form below and sending it as an e-mail attachment to Debra Hartzeli Nyby at the e-mail address listed above and indicating whether you will be sending a check or if you would like to be sent an invoice.

OR (3) Registering on line at the short course’s website and paying by credit card.
http://wordpress.lehigh.edu/inadvmus/

Name ______________________________________________________________
_________________________ ________________________________________________
First Name Initial
Last Name
Country: __________________________________________________________
City State Zip Code
Street Address 1 __________________________________________________
Street Address 2 __________________________________________________
Telephone: __________________________ Fax: __________________________
E-Mail Address: ______________________________________________________
Dates Attending (please specify) ________________________________