Multi-Angle

Winter 2016

Contents

Training

The acclaimed Light Scattering University (LSU) course, held in Santa Barbara, CA on the American Riviera, is guaranteed to demystify light scattering, work you hard but feed you well, and explain how to get the most from your Wyatt Technology instruments.

Watch the new LSU Experience video

Upcoming classes

The next available LSU classes begin January 24, February 21, March 14 and April 18.

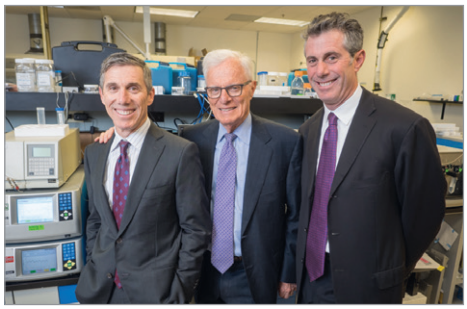
Dyna-LSU classes begin January 26, February 23, March 16 and April 20.

Check the full schedule

Wishing you the best of Holidays

On behalf of our entire company, I wanted to take this opportunity to wish you and your families a wonderful holiday season. The end of the year is, in its own way, a commencement of the New Year, and our company has enjoyed 34 years of prosperity thanks to your business. We never forget that you—our customers—are the entire reason we're here! Without you, who knows what odd jobs we'd all be performing. We certainly wouldn't be working with some of the most talented scientists in the world, that's for sure! Our company is founded on the family-owned-and-operated premise that "this time, it's personal." We hope that this is reflected in all of our interactions with you, and that we're not some nameless, faceless, analytical instrument company that could be replaced by some other entity. Have a great holiday and please don't ever hesitate to let us know how we can help you to be more productive with our instruments.

—Geofrey Wyatt



Geofrey Wyatt, Dr. Philip Wyatt, Clifford Wyatt

We're moving! Just not very far...

Yes, it's true. Wyatt Technology is moving its premises in January 2017. For those of you who have known—and loved—our location at 6300 Hollister Avenue, do not fret. We are moving about 100 meters away to 6330 Hollister Avenue. Not only will we still be located on the same street, but we'll still be located in the same building. So why are we moving? It certainly isn't because we like to move. Who likes to move?!

We're moving because we've simply run out of space. In the past 10 years our workforce here in Santa Barbara has more than tripled, but our space has only increased by a third. Now we're moving to a space previously occupied by a medical robotics company that has about 4,200 square meters (45,000 square feet) of space—an increase of about 50% over what we currently have. We'll have a much bigger and better applications lab, manufacturing space, service area, and our software and hardware teams will once again be working in the same general vicinity. We have new patio space being constructed, more offices and modular furniture, as well as better areas for all-company meetings and LSU lectures.

So while we aren't looking forward to the upheaval in January to get there, we are looking forward to getting settled!

Construction at 6330 Hollister

GxP for DLS: 21CFR (11) compliance for DynaPro and Mobius

Does your institution require compliance with 21 CFR part 11? The upcoming release of DYNAMICS, version 7.6 provides a complete (optional) compliance package utilizing a secure Microsoft SQL server database. With DYNAMICS Security Pack you can transfer all your DLS and MP-PALS methods utilizing the DynaPro Plate Reader, DynaPro NanoStar or Mobius to your organization's Process Development and QC labs. Enhance productivity in those operations by taking advantage of the Plate Reader's and Mobius' automation options for size, aggregation and zeta potential analyses.

Scheduled for release in the second half of January 2017, DYNAMICS SP provides for electronic signatures, a full audit trail and multiple levels of permissions, from guest and technician to researcher and administrator. The compliance approach is based on the ASTRA Security Pack and will feel familiar to anyone who uses ASTRA SP. Contact your local Wyatt representative or e-mail info@wyatt.com for pricing and additional details.

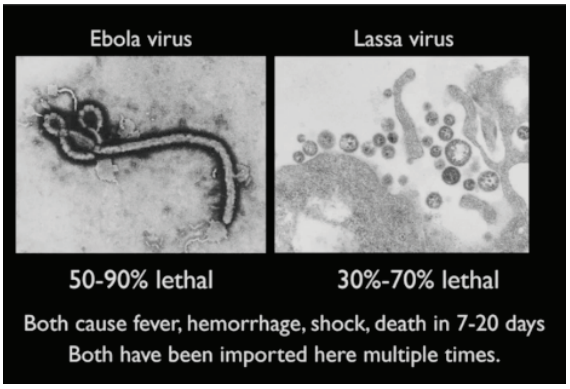
P.S. Even if you do not need the Security Pack, if you use DYNAMICS you will find a major benefit in DYNAMICS 7.6: a new file format that eliminates bottlenecks during long runs with large data acquisitions plus enhanced crash recovery. Check the Support Center at www.wyatt.com/Support in January for the new release.

Illuminating the viral molecular toolkit

Viruses are not only nasty little buggers, they are also very, very clever. Hijacking the translation and transcription mechanisms of their host cells in order to replicate is not their only trick. As discussed by Erica Ollmann Sapphire of Scripps Research Institute at Wyatt's 2015 International Light Scattering Colloquium, they have evolved contortionist proteins, that change their structure in order to perform distinct biological functions. The different conformations bind different proteins with different stoichiometries, creating a variety of interactions for multiple purposes. This versatility allows the viruses to make do with just a handful of genes - 7 in filoviruses such as Ebola and Marburg, and just 4 in the arenavirus family, which includes Lassa, LCMV (the cause of aseptic meningitis), and Machupo.

Dr. Erica Ollmann Sapphire of Scripps Research Institute

At the Sapphire lab, SEC-MALS and CG-MALS play significant roles in elucidating the structure and function of viral proteins and their complexes with host proteins, as well as investigating and optimizing therapeutic antibodies targeting viral diseases. If you did not have the opportunity to attend ILSC and hear Dr. Sapphire's talk, you may now view it via on-demand webcast at: http://www.wyatt.com/hemorrhagic-fever-virus-webinar.



To learn about the use of Composition-Gradient MALS for analyzing viral glycoprotein self-association and the intricate scheme by which targeting IgG binds to it, read the application note based on the ILSC poster presented by Kate Hastings and other Sapphire group members at http://www.wyatt.com/files/literature/app-notes/cg-mals/scripps-vgp+igg.pdf.

Sigma XI Inducts 12 Wyatt Technology PhD-level Scientists

Wyatt Technology proudly announces that twelve of its scientists have been inducted into Sigma Xi, The Scientific Research Society. Sigma Xi is the world's largest, multidisciplinary honor society for scientists and engineers. The Wyatt Scientists who have been inducted can be found here.

The newly inducted members join Sigma Xi's global network of those who have been recognized for their achievements in research. "Wyatt Technology competes against some of the largest analytical instrument companies in the world. Our 30+ years of delighting our customers can be attributed to the scientific excellence of our Research and Development staff in bringing exceptional products to market. This announcement is a further validation of our organization's continuing commitment to innovative research," said Dr. Philip J. Wyatt, CEO of Wyatt Technology.

Sigma Xi works to enhance the health of the research enterprise, foster integrity in science and engineering, and promote the public's understanding of science. More information can be found at www.sigmaxi.org.


Sophia Kenrick, Ph.D.


Jason Lin, Ph.D.


Izhar Medalsy, Ph.D.


Vincent Hsieh, Ph.D.


Michael Larkin, Ph.D.


Daniel Some, Ph.D.


Andre Mueller, Ph.D.


David Rahmlow, Ph.D.


Shiva Ramini, Ph.D.


Mark Spears, Ph.D.


Steven Trainoff, Ph.D.


Michelle Radeke, Ph.D.

Wyatt congratulates its customer, Sir James Fraser Stoddart on receiving the Chemistry Nobel Prize

Wyatt Technology congratulates its customer, Sir J. Fraser Stoddart of Northwestern University on sharing the Nobel Prize in Chemistry with Bernard L. Feringa and Jean-Pierre Sauvage. They have developed molecules with controllable movements, which can perform a task when energy is added. We are delighted to see their work on nano-motors recognized as the building blocks for future molecular machines. Some of Professor Stoddart's publications using our DAWN® instruments may be found in our Bibliography. They include:

E. N. Guidry, J. Li, J. F. Stoddart, R. H. Grubbs., Bifunctional [c2]daisy-chains and their incorporation into mechanically interlocked polymers. *Journal of the American Chemical Society* 2007 **129**, 8944-8945.

M. A. Olson, A. B. Braunschweig, T. Ikeda, L. Fang, A. Trabolsi, A. M. Z. Slawin S. I. Khan, J. F. Stoddart., Thermodynamic forecasting of mechanically interlocked switches. *Organic and Biomolecular Chemistry* 2009 **7**, 4391-4405.

W. Zhang, E. Delonno, W. R. Dichtel, L. Fang, A. Trabolsi, J.-C. Olsen, D. Bentez, J. R. Heath, J. F. Stoddart., A solid-state switch containing an electrochemically switchable bistable poly[n]rotaxane. *Journal of Materials Chemistry* 2011 **21**(5), 1487-1495.

This is just a sampling of the many peer-reviewed articles utilizing Wyatt instruments that may be found by searching our online Bibliography.

Click here to read the official press release on the award and Sir J. Fraser Stoddart's research.

Upcoming events

Wyatt Short Course at Pittcon 2017: Light Scattering Techniques

Will you be attending the 2017 Pittsburgh Conference, March 8-12 in Chicago, IL?
If so, you might be interested to learn that Wyatt staff will be conducting a ½-day Short Course:

Light Scattering Techniques for Protein, Polymer, and Nanoparticle Characterization

Instructor: Sigrid Kuebler, Ph.D.
Monday, March 6, 2017

This session is an introductory course, and no previous light scatting experience is required. It is suited for scientists in the pharmaceutical, chemical, biotechnology, nanotechnology and medical device industry, as well as researchers working in academic or government labs who wish to learn how light scattering can help them characterize their proteins, synthetic or natural polymers, and nanoparticles. Similar to a "mini" Light Scattering University®, it is a great light scattering refresher.

Refresh and improve your light scattering skills, or dig into unfamiliar applications of multi-angle, dynamic and electrophoretic light scattering! Click on the link above for more information and to register. And, don't forget to stop by our exhibitor booth #2524 as well, pick up the latest literature, and say hello to the Wyatt Team!

Live webinar - January 17th

Click on the link below to learn more and register

"Check your Protein Samples for Aggregates and Perform Effective Quality Control Using Dynamic Light Scattering (DLS)"

Presented by: Felix Gloge, Ph.D.
Application Scientist, Wyatt Technology Europe

LSU classes

LSU classes
January 24-26
February 21-23
March 14-16
April 18-20

Dyna-LSU classes
January 26-27
February 23-24
March 16-17
April 20-21

Register now

Users Meetings

April
Mid-Atlantic Protein & Biotech

May
San Francisco Bay Area Protein & Biotech

June
Southern California Protein & Biotech

What's new @Wyatt

Recently added on-demand webinars

- Innovations and Applications of UHP-SEC and Multi-Angle Light Scattering (MALS) for the Analysis of Biotherapeutic Proteins
- Small, but bright: µSEC-MALS adds light scattering to UHP-SEC for biophysical characterization of biotherapeutics
- Characterizing molecular structure in synthetic and natural polymers by multi-angle light scattering
- Advances in online viscometry: extending the limits of detection for intrinsic viscosity and hydrodynamic radius
- Biotherapeutics Form and Function: Case Studies in Light Scattering

Recent publications and blog posts

- Label-Free Characterization of the Reversible Self-Association of Insulin
- Cre-loxP Cooperative Binding by CG-MALS
- Commercializing multi-angle light scattering instruments - an interview with Philip Wyatt
- Cutting edge women use cutting edge instruments

Career opportunities

Excellence is our passion. Wyatt customers know they can rely on Wyatt to provide the best instruments, training and support available. If supporting cutting-edge science is your passion, Wyatt may be the place for you! Check the Careers page or click on a job link on the right to see a detailed description of each position.

Customer service & support
Application Scientist
Application Scientist – DC Region
Application Scientist - Mid-West Region

Marketing
Application Scientist - Marketing
Marketing Product Line Manager

Sales
Inside Sales Manager
Account Manager - Boston Area
Sales Administrator

Keep in touch

As a small, family-owned and operated company, we consider every customer to be part of the Wyatt Technology family. We do our best to get to know you first-hand; and, as a family, we like to keep in touch! Several social media channels help us accomplish this:

Wyatt Technology | LinkedIn
Stay up-to-date with notifications on our latest events, webinars, blogs and career openings.

Social@Wyatt
Join our community for topical discussion groups.

Linkedin Groups
Ask your light scattering peers for advice, keep up-to-date with the latest Wyatt news, or reconnect with LSU classmates through our LinkedIn groups.

Wyatt Technology Group
Open to anyone interested in the technology and applications of light scattering for characterization of macromolecules and nanoparticles in solution. Get the latest news and join the technical discussions.

Light Scattering University Graduates
For active users of Wyatt instruments.

Light Scattering for the Masses®