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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](#)



Springtime is the season to reconnect

And regional Wyatt User Meetings are the place to do it! Meet Wyatt scientists and your colleagues in light scattering. [Click here](#) to find out when and where.

Just released! The first in the ILSC 2015 series of webcasts



On November 4, 2015 Dr. Joseph Glajch, Director of Analytical Development at Momenta Pharmaceuticals gave his Plenary Presentation “[SEC-MALS for the Characterization of Complex Drugs and Sugar-Protein Complexes of Immunological Importance](#)” at the 24th Annual International Light Scattering Colloquium. The theme Light Scattering in the Nano World brought leaders of nanotechnology research together with those active in biotechnology, biomolecular chemistry, and polymer chemistry for two days to discuss the many ways in which analytical light scattering advances scientific research.

[Click to view](#) the archived webcast of this presentation.

DYNAMICS 7.4 – Look for it!

World-class scientific instruments need world-class software for data analysis. At Wyatt we work hard to make that a reality for our customers. This spring we are pleased to announce our latest software release: DYNAMICS® 7.4, which ties up some loose ends and puts [DYNAMICS](#) in a position to make some major improvements going forward.

For those of you who have a [Möbius®](#) as well as a [NanoStar®](#) or a [DynaPro® Plate Reader](#), version 7.4 means the end of two separate DYNAMICS versions for the different instruments. It controls and performs data analysis on all DLS and MP-PALS instruments. Running long acquisitions, multi-well plate scans, temperature ramps or complex event schedules? Is your PC feeling sluggish trying to plow through so much data? Update to DYNAMICS 7.4, which implements a new engine under the hood, parallelizing data handling and analysis in order to take advantage of the power of multi-core processors. You'll feel the breeze as those large data sets whip by. And, finally, have you been using the DynaPro to analyze the viscosity of high-concentration protein solutions? Well, you can toss those Excel spreadsheets. The long-awaited DLS viscosity analysis is implemented in DYNAMICS 7.4 as well!

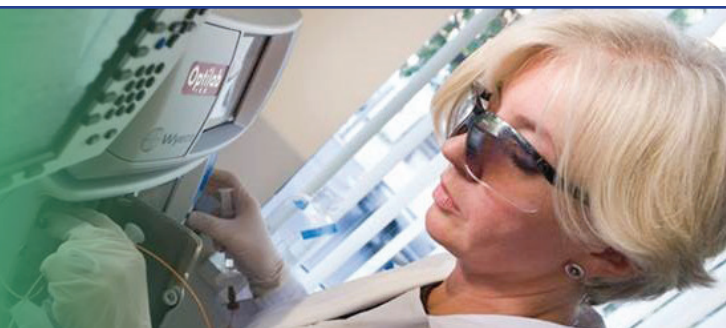
We're just finishing up DYNAMICS User's Guide updates and should have the new release available in the [Wyatt Support Center](#) within a few weeks. If you don't have a current subscription to the Support Center, please contact support@wyatt.com to renew and gain access to all software updates.



FOCUS ON

Ewa Folta-Stogniew, Ph.D.

Yale School of Medicine,
Keck Laboratory Biophysics Resource



Dr. Ewa Folta-Stogniew is one of the more prolific proponents of light scattering for the characterization of biological macromolecules in solution. Her many contributions, the most recent of which appeared in [Science Signaling](#), [Molecular Cell](#) and [Nature Communications](#), have covered the determination by [SEC-MALS](#) and [FFF-MALS](#) of the molar mass, size and association state of native and modified proteins, nucleic acids, membrane proteins solubilized by detergents, and the complexes that these form. The majority of her light scattering work has been carried out under the auspices of the [Biophysics Resource of Keck Laboratory](#), which she established at Yale University's School of Medicine in 1998. Since then the Keck Biophysics Resource has become the go-to center for biophysical characterization services, not just of New England but for the US and globally.

Dr. Folta-Stogniew received her Ph. D. in Molecular Biophysics from Wesleyan University in Middletown, CT and M.Sc. in Chemistry from Technical University of Wroclaw (Poland). In 1993 she was awarded the Petersson Fellowship Award from Wesleyan University, and in 1996 the Brown-Coxe Fellowship Award from Yale University. Her first independent research project involved the synthesis of a fluorescent analog of ATP that was used to covalently label and map a protein's [nucleotide binding site](#). This work so fascinated her that it led her to pursue a career in research, dramatically switching her field of study to NMR and the dynamics of individual base pairs in nucleic acids.



The most exciting benefit of SEC-MALS, in her experience, is the ability to determine the native solution molecular weights of proteins, protein-protein complexes and other macromolecular constructs, completely independently of SEC elution position and thus free of the impact of non-globular conformations or interactions with the SEC packing. Among other channels, she has introduced the life science community to these advantages via a 2009 publication in the [Encyclopedia of Life Sciences](#).

Prior to the year 2000, SEC-MALS was not widely used in biological sciences. With NIH funding, the Biophysics Resource acquired Wyatt [DAWN®](#) and [Optilab®](#) instruments for a standard SEC-MALS setup, a [DynaPro](#) dynamic light scattering (DLS) detector for cuvette-based size measurements (which are often used to assess protein solution quality as well as hydrodynamic radius), and more recently a complete SEC-FFF-MALS system including an [Eclipse™](#). Academic and industrial users from the US and abroad enjoy the benefits of reliable and professional sample analyses at the Resource, where Ewa serves as Director and is solely responsible for the implementation and support of nine different state-of-the-art characterization technologies. Data collected and expertly interpreted at the resource have contributed to over 80 publications, majority of which include MALS results.



In her spare time, Ewa enjoys cooking and traveling with her husband and two children. An avid skier, she's traveled throughout Europe and North America, skiing in 7 states and 4 European countries, with Utah being her favorite destination. She has presented case studies at Wyatt Technology's International Light Scattering Colloquium events in 2002 and 2011, and will be presenting a webinar on this topic next month – [click here for details](#). Wyatt has been pleased to support Dr. Folta-Stogniew's research with cutting-edge instrumentation, and we look forward to future collaborations as well!

HIGHLIGHTS:

Light Scattering Reveals Novel Applications of DNA



Deoxyribonucleic acid (DNA) is an amazingly versatile molecule thanks to its unique structure and stability. Encoding and passing on to subsequent generations all inheritable genetic information, the DNA molecule plays a well-known, pivotal role in the biological world. However, DNA has also been the subject of cutting-edge research in fields outside the usual scope of genetics and biology, from nanotechnology and nanoelectronics to drug delivery and even optogenetics, taking advantage of its highly customizable properties. Light scattering, of course, plays an important part in many of these studies. Here are just four of many examples:

DNA is not just a genetic biomolecule – it can be a nanotechnological tool as well. Mustafa et al. showcase this capability in their investigation of fluorescent emission from the surface-functionalized nanoparticles, controlled by single-stranded DNA (ssDNA) molecules (Mustafa B. et al. (2014). “**DNA-length-dependent quenching of fluorescently labeled iron oxide nanoparticles with gold, graphene oxide and MoS₂ nanostructures.**” *ACS Appl. Mater. Interfaces* 6:12100-10. doi: 10.1021/am503553h). The scientists used Wyatt's **DynaPro** dynamic light scattering instrument to monitor the increase in the nanoparticle's hydrodynamic radius R_h with increasing length of ssDNA, in order to verify attachment and correlation to ssDNA length. In turn, the degree of fluorescence quenching was tuned according to the ssDNA length, providing a glimpse into how hybrid bionanomaterials may be engineered with tunable optical properties...

[Continue reading](#)



What's New @Wyatt

Recent publications, posters, white papers and blog posts



Recent applications of light scattering measurement in the biological and biopharmaceutical sciences



Enhanced assessment of nanoparticle colloidal stability via FFF-PALS



Overcoming the Challenges of Nanoparticle Characterization with a Light Scattering Toolkit



High-Throughput Dynamic Light Scattering (HT-DLS) for Screening Biotherapeutic Formulations



Robust and Repeatable Nanoparticle Drug Delivery Characterization with FFF-MALS-DLS



We invite you to read and contribute to our [new blog](#).

Recently Added On-Demand Webinars



[AF4-MALS: A Powerful Tool for the Characterization of Biomacromolecules and Colloidal Particles](#)



[ILSC 2015 Plenary: SEC-MALS for the Characterization of Complex Drugs and Sugar-Protein Complexes of Immunological Importance](#)



[Essential Polymer Characterization: The Benefits of Multi-Angle Light Scattering \(MALS\) and Field Flow Fractionation \(FFF\) for Determining Molecular Weights, Sizes and Branching Ratios](#)



[Drug Delivery Nanoparticles Illuminated: The Light Scattering Toolkit - Part 1, Batch Measurements](#)



[Drug Delivery Nanoparticles, Illuminated: The Light Scattering Toolkit – Part 2, Online Measurements](#)

Upcoming Events

Live Webinars

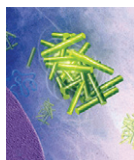
“Light Scattering 101:
Fundamentals of Light Scattering”

April 5 – 8:00am PT, 11:00am ET
Dr. Sigrid Kuebler,
Dir. of Customer Service, Wyatt Technology
[Register now](#)



“Optimizing Protein Biotherapeutic Formulations with the Light Scattering Toolkit”

April 20 – 8:00am PT, 11:00am ET
Dr. Daniel Some
Dir. of Marketing, Wyatt Technology
[Register now](#)



“Light Scattering 102:
Principal Applications of Light Scattering”

May 18 – 8:00am PT, 11:00am ET
Dr. Sigrid Kuebler,
Dir. of Customer Service, Wyatt Technology
[Register now](#)



Protein & Biotech User Meetings

Click on a link below to learn more

Northeast

April 12, Woburn, MA
Guest Speakers:
Dana Filoti, AbbVie Bioresearch Center
Wing-Yee Fu, Momenta Pharmaceuticals
Chris Broomell, Takeda Vaccines

Mid-Atlantic

April 14, Princeton, NJ
Guest Speakers:
Matthew Haas, GlaxoSmithKline
Bregje de Kort, Merck and Co. Inc.
Hiten Gutka, Oncobiologics Inc.
Joshua Katz, The Dow Chemical Company

San Francisco Bay Area

May 12, Foster City, CA
Guest Speakers:
Dennis Leung, Genentech Inc.
Justin Low, Genentech Inc.
Lars Nilsson, Lund University

Southern California

June 7, San Diego, CA

Research Triangle Park

June 14, Chapel Hill, NC

District of Columbia

September 15, Bethesda, MD

Polymer & Nanoparticle User Meeting

Click on link below to learn more

Mid-Atlantic

September 13, Wilmington, DE

Seminars

Click on a link below to learn more

PEGS Boston

April 27 – 3:15 PM
Seaport World Trade Center,
Boston, MA



“Smaller, Faster, Deeper: Advanced Light Scattering Tools for Biophysical Characterization”

Dr. John Champagne,
Senior Applications Scientist
and Northeast Regional Manager

2016 AAPS, National Bioechnology Conference

May 17 – 1:00-5:00pm
Sheraton Boston Hotel,
Boston, MA



“The Light Scattering Toolkit for Formulation Studies and Biophysical Characterization: Not Just Aggregation”

Dr. John Champagne,
Senior Applications Scientist
and Northeast Regional Manager

LSU Classes

LSU Classes

April 19-21
May 17-19
May 25 (Woburn, MA)
June 14-16
July 12-14
July 26-28
August 16-18

Dyna-LSU Classes

April 21-22
May 19-20
June 16-17
July 14-15
August 18-19

[Register now](#)



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 below to see a detailed description of each position.

Customer Service & Support

Application Scientist – DC Region
Application Scientist – NE Region
Application Scientist – NJ Region
Customer Service Representative

Internship Opportunities

2016 Summer Internships

Manufacturing

Production Assembler

Marketing

Application Scientist

Quality

Director of Quality Assurance

R&D

R&D Mechanical Engineer

Sales

Inside Sales Manager

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

[Wyatt Technology | LinkedIn](#) – Stay up-to-date with notifications on our latest events, webinars, blogs and career openings.



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.



[Social @Wyatt](#) – Join our community for topical discussion groups.

The Solution is Light™