# Wyatt logo no address full circle thicker lines\\Wyatt-data\Users\skuebler\LSU\ASTRA 6 2011 LSU Update\Additional documents for 2011 update\LSU Banner Redux_r3.jpg

# **Welcome to Light Scattering University at Wyatt Technology!**

**We’re delighted you are joining us today for Light Scattering University, a course that's guaranteed to de-mystify light scattering, work you hard but feed you well, and, of course, explain how to get the most from your Wyatt Technology equipment!**

Your LSU Course Manual contains printouts for all lectures, lab sessions and seminars, daily summaries and review questions. Your LSU training materials also contain electronic copies of the lectures and other course materials for your convenience. All printed and electronic materials are copyrighted by Wyatt Technology Corporation.

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We are also pleased to announce the recent release of ASTRA 6 software. All printed course materials will describe the use of ASTRA 6. Your electronic course materials contain documents and examples describing the use of both ASTRA 6 and ASTRA V.

Please contact us at [info@wyatt.com](mailto:info@wyatt.com) or 1-805-681-9009 if you have any questions. Thank you!

**Welcome again and enjoy your training!**

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| **Light Scattering University Schedule** | | |
| Day 1 | *Group 1* | *Group A* |
| 8:30 - 10:45 | Welcome / Lecture: “Introduction to Light Scattering” (C) | |
| 11:00 - 12:30 | Seminar: DAWN Hardware | |
| 12:30 - 1:15 | Lunch | |
| 1:15 - 2:30 | Workshop: “Flow Cell Cleaning & Care” (C) | |
| 2:45 - 3:45 | Seminar: ASTRA (C) | Lab: “Zimm Plots” (L) |
| 4:00 - 5:00 | Lab: “Zimm Plots”(L) | Seminar: ASTRA (C) |
| 5:00 - 5:30 | Light Scattering Demo & Summary (C) | |

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| Day 2 | *Group 1* | *Group A* |
| 8:30 - 9:00 | Quiz 1 (C) | |
| 9:00 - 10:15 | Lecture: “Size Exclusion Chromatography with LS Detection (SEC-MALS)”(C) | |
| 10:30 - 11:30 | Workshop: ASTRA (P) | Lab: SEC-MALS (L) |
| 11:30 - 12:30 | Lab: SEC-MALS (L) | Workshop: ASTRA (P) |
| 12:30 - 1:15 | Lunch | |
| 1:30 - 2:30 | Lecture: “Beyond SEC-MALS” (C) | |
| 2:45 - 3:45 | ASTRA Challenge (P) | ASTRA Calculations Workshop (C) |
| 4:00**-** 5:00 | ASTRA Calculations Workshop (C) | ASTRA Challenge (P) |
| 5:15 - 5:30 | Summary (C) | |

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| Day 3 | | *Group 1* | *Group A* | |
| 8:30 - 9:15 | | Quiz 2 (C) | | |
| 9:15 - 10:15 | | Lecture: “Introduction to Dynamic Light Scattering and Electrophoretic Mobility” | | |
| 10:30 - 11:30 | | Lab: Measuring dn/dc (L) | ASTRA Data Review (P) | |
| 11:30 - 12:30 | | ASTRA Data Review (P) | Lab: Measuring dn/dc (L) | |
| 12:30 - 1:30 | | Lunch | | |
| 1:30 - 2:30 | | Light Scattering Museum Tour (M) | | |
| 2:45 - 4:15 | | Scatter Sessions (C/L/M/P) | | |
| 4:30 – 5:00 | | Summary & Evaluations (C) | | |
| (C) = Conference room (L) = Laboratory (M) = Museum (P) = PC Lab | | |

***Light Scattering University Course Manual***

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**Day 1**

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**Day 2**

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| Lecture: Size Exclusion Chromatography with Light Scattering Detection (SEC-MALS)…..…………. | 6 |
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# **List of Scatter Sessions offered on Day 3 of the LSU Training**

|  |  |  |
| --- | --- | --- |
| **Sessions (choose 2)** | **Topics** | **For who?** |
| **Protein Conjugate Workshop:** | How to analyze PEGylated, glycosylated proteins, membrane proteins and copolymers and quantify protein/modifier fractions or copolymer fractions | Those who need to analyze and quantify protein conjugates or copolymers |
| **Particles Workshop:** | How to analyze size and number density of particles, such as viruses and virus-like particles, nanoparticles, liposomes, …. | Those interested in measuring particle size and particle numbers of their samples |
| **QELS Workshop** | Maintenance and troubleshooting of your QELS hardware and ASTRA QELS methods | Wyatt QELS users |
| **Optilab rEX Workshop:** | How the Optilab rEX detector works, maintenance and troubleshooting | Optilab rEX users |
| **ViscoStar Workshop:** | How the ViscoStar detector works, maintenance and troubleshooting | ViscoStar users |
| **Absorbing/Fluorescing Samples:** | How to correctly measure absorbing or fluorescing samples | Users who measure fluorescing or absorbing samples |
| **Installing Hardware:** | How to install your brand new Wyatt detectors | Users who are planning to do their own installation or need to reinstall their detectors. |
| **Dynamics Software Workshop** | Self-guided tutorial on how to use Dynamics software | DynaPro NanoStar, Plate Reader and Titan users |
| **DynaPro DLS Demo** | Lab demonstration of the DLS Plate Reader and DynaPro NanoStar | Those interested in high-throughput and conventional DLS |
| **Möbiuζ Demo** | Lab demonstration of the Möbiuζ to measure electrophoretic mobility of samples | Those interested in measuring zeta potential, effective charge and isoelectric point |
| **Eclipse FFF Demo:** | Lab demonstration of Field-Flow Fractionation Separation instrument and techniques | Those interested in learning how FFF can help their research |
| **Calypso Demo:** | Lab demonstration on how to quantify association of proteins, protein association kinetics and automation of A2 determination | Those interested in protein association and association kinetics |
| **Online A2 Demo:** | How to measure A2 using online methods using an autosampler, ASTRA online A2 methods | Those interested in A2 measurements |
| **ASTRA 5 Security Pack:** | Database administration and security with ASTRA 5 Security Pack | ASTRA 5 Security Pack users |

*✍ Sign up on the white board in the Computer Lab during the morning of Day 3! ✍*

*Additional individual and special interest sessions are available on request – just ask us!*