



Exhibitor Program

Show Hours

Fri., May 26 — 7:30 p.m. to 10:30 p.m.

Sat., May 27 — 10 a.m. to 7:30 p.m.

Sun., May 28 — 10 a.m. to 7:30 p.m.

Mon., May 29 — 10 a.m. to 7:30 p.m.

AIP Publishing/Structural Dynamics**#202**sd.aip.org

Co-published by AIP Publishing and ACA, Structural Dynamics is a peer-reviewed, open access, online-only journal that highlights research articles on the structural determination and dynamics of chemical and biological systems and solid materials. Stop by our booth to learn more about our upcoming Special Topic Issues and incentives for ACA members

American Crystallographic Association**#200**www.AmerCrystalAssn.org

Since 1947, American Crystallographic Assn represents crystallographers in North & South America and welcomes members from around the world. The Canadian Div. exists to promote the interests of Canadian members and provide for an elected official to represent this interest on Council.

There are 12 Scientific Interest Groups: Biological Macromolecules, Fiber Diffraction, General, Industrial, Light Source, Materials Science, Neutron Scattering, Powder Diffraction, Service Crystallography, Small Angle Scattering, Small Molecules, and Young Scientists.

ACA is a Regional Affiliate of IUCr, publishes Structural Dynamics, an online, open access journal, ACA RefleXions, a quarterly magazine, and hosts the largest annual crystallographic annual meeting in the Americas. ACA... where structure matters

American Institute of Physics**#204**www.aip.org

Your ACA membership also comes with benefits from AIP, the American Institute of Physics. AIP sends Physics Today magazine to ACA members, sponsors science policy fellowships for which ACA members can apply, and enables 100+ undergraduates to experience ACA student membership.

Amersterdam Scientific Instruments BV**#405**www.amscins.com

Amsterdam Scientific Instruments (ASI) markets hybrid pixel detectors which are developed in collaboration with CERN. Visit our booth to get an in-depth view of how our technology can excel your X-ray and Electron Microscope experiments

Anatrace**#215**www.anatrace.com

For 30 years, Anatrace has strived to develop and supply the industry's finest products for protein science. Building on our portfolio of detergents and lipids, the addition of Microlytic crystallization tools and screens and our line of protein purification products, allow us to fully support the entire structural biology pipeline.

Anton Paar**#314**www.anton-paar.com

Anton Paar's SAXSpace and SAXSpot systems offer high-performance Small and Wide Angle X-ray Scattering (SAXS, SWAXS) for all applications in protein and pharmaceutical labs and beyond. Brilliant sources, superior optics, and detectors enable high-resolution analysis of size, shape and inner structure of proteins and a wide range of additional applications

ARINAX**#418**www.arinax.com

ARINAX (www.arinax.com) is one of the world leading equipment suppliers for macromolecular X-ray crystallography beamlines. Well known for our single crystal diffractometers MD2 and MD3 we also suggest solutions for the handling of macromolecular crystals. On the ACA2016 and for the first time we'll present our fully automatic crystal harvester CrystalDirect® to the US-American crystallography community. This cutting edge equipment, developed by the European Macromolecular Biology Laboratory (EMBL), will fill an existing gap within the molecular structure determination pipeline, located between crystal growth and structure data collection on synchrotron beamlines.

Art Robbins Instruments**#203**www.artrobbins.com

ARI compliments its successful crystallization instrument array with the addition of the CRYSCAM UV, the ultimate detection system for capturing Visual and UV images. The CRYSCAM UV, the CRYSTAL GRYPHON LCP, and the SCOPRION combined with the INTELLI-PLATE® assay plates provides speed, flexibility, accuracy and efficiency in the Crystallization process.

Avanti Polar Lipids Inc.**#313**www.avantilipids.com

Avanti Polar Lipids, Inc. has served the Pharmaceutical, Nutraceu-tical Industries and Lipid Researchers since 1967. Divisions: Re-search Products-Highest Purity Lipid Reagents cGMP Manufac-turing-API & Contract Manufacturing Adjuvants-Immunotherapy & Vaccine Development Analytical Services-Lipid Analysis Lip-idomics-MS Standards, Antibodies & Lipid Toolbox Formulations-Liposomes & Nanoparticle Equipment- Liposome Production Tools; Custom Services-Synthesis & Beyond

Bruker**#302,304,303,305**www.bruker-axs.com

Provider of advanced X-ray solutions in life sciences, chemical and materials science. The D8 VENTURE and D8 QUEST solutions for structural biology and chemical crystallography feature the cutting edge PHOTON II CPAD detector. Systems include state of the art rotating anode generators and the new IuS 3.0 microfocus sources with low maintenance and high brilliance for Mo, Ag or Cu. Our industry-leading systems provide highest sensitivity for micro crystals and weak diffractors, with powerful crystallographic software. Stop by booth #25 to see our latest single and dual source systems as well as our revolutionary METAJET Ga X-ray source.

Cambridge Crystallographic Data Centre

#416

www.ccdc.cam.ac.uk

The Cambridge Crystallographic Data Centre is dedicated to the advancement of chemistry and crystallography for the public benefit. We support structural chemistry worldwide by developing the Cambridge Structural Database (CSD), the world's only comprehensive, up-to-date, and fully-curated knowledge base of small molecule crystal structures, and through collaborative research studies.

CCP4 - STFC

#212

www.ccp4.ac.uk

The Collaborative Computational Project No. 4 (CCP4) provides software for macromolecular structure determination by X-ray crystallography which is widely used by commercial organisations and academic institutions around the world. CCP4 staff will be available to discuss any aspect of the project, including the latest release (6.5.0), the COOT and CCP4MG molecular graphics packages, and data-processing with MOSFLM and iMOSFLM. Other highlights in the latest release include re mac5.8 for refinement, CRANK2 for experimental phasing, and core distribution of the ARP/wARP model building package. Later in the year we will be releasing 7.0 which will include the DIALS data processing software and CCP4i2 (the new CCP4 interface).

Center for the Advancement of Science in Space (CASIS)

www.iss-casis.org

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The mission of the Center for the Advancement of Science in Space (CASIS) is to maximize the utilization of the International Space Station National Laboratory for research and technology development aimed at benefitting humankind. CASIS supports collaboration with NASA, other government agencies, not for profit institutions, industry partners, and commercial entities committed to exploring the intellectual, technological and economic opportunities offered by space. CASIS is actively engaged in supporting projects within the field of protein crystallization. In addition to supporting current flight projects CASIS is working with the user community to outline the basic

science requirements for a long-term protein crystallization program aboard the International Space Station National Lab. The collaborative initiative is currently outlining the accessibility/timing, resources (flight/ground), education and funding needs required to create a sustainable program. Ultimately the work will lead to an ISS National Laboratory PCG initiative for repetitive, low-cost crystallization in microgravity providing a platform for human healthcare discovery to users across the discipline including commercial, other government agencies, academia and private research. In addition to these goals, CASIS is committed to inspiring the next generation through experiential learning opportunities.

Dectris Ltd.

#316

www.dectris.com

DECTRIS Ltd. is the leading company in Hybrid Photon Counting (HPC) X-ray detection. DECTRIS' pioneering technology has transformed basic research at synchrotron light sources, as well as X-ray applications in laboratory diffractometers. The broad portfolio of DECTRIS' detectors is carefully scaled to meet the needs of various applications. With an aim to continuously improve the measurement quality, DECTRIS also provides solutions for customer developments in scientific and industrial x-ray detection, thereby pushing the state of the art and enabling new scientific findings.

Douglas Instruments Ltd

#408

<http://www.douglas.co.uk/>

Douglas Instruments designs and manufactures the Oryx range of systems for automatic protein crystallization, offering a variety of screening and optimization techniques and specializing in random microseed matrix-screening (rMMS). New scripts include faster dispensing and reservoir filling for 2D optimization with the Oryx4.

Formulatrix**#315**

www.formulatrix.com

Second Order Non-linear Imaging of Chiral Crystals (SONICC) is an exciting new protein detection tool that uses pulsed lasers to exploit the intrinsic frequency-doubling property found in protein crystals to produce high-contrast images. Our upgraded UV imaging systems can distinguish between protein and salt crystals with short exposure times and now with improved image quality. Rock Maker 2.0 is a powerful, yet easy to use software solution that automates the entire protein crystallization process. Formulatrix is a next-generation liquid handler that uses patent-pending microfluidic technology to dispense reagents up to ten times faster than traditional liquid handlers.

Huber Diffraction USA**#404**

www.xhuberusa.com

Huber Diffraction designs and manufactures high-precision positioning systems primarily used for X-ray diffraction in laboratories and at synchrotron beam sources. Other application fields are diffraction experiments with neutrons, laser technology, astronomy and precise measurement technology.

International Union of Crystallography**#216**

www.iucr.org

The IUCr Associates Programme (<http://www.iucr.org/people/associates>) at the IUCr Congress in Hyderabad (<http://www.iucr2017.org/>). Participate in the Union's development and take advantage of the 20% pre-launch discount by registering your interest at the IUCr booth. Also learn about the exciting developments taking place across our outreach programmes and publications.

Lawrence Berkeley Laboratory - Advanced Light Source #206

www.als.lbl.gov

Come to our booth and learn about the ALS scientific program and the outstanding capabilities of its beamlines. You will even have the opportunity to do a test-run on a beamline by remote access! Located above the UC Berkeley campus, the ALS is the

destination for over five hundred structural biologists every year, with its world-class beamlines available for protein and chemical crystallography, SAXS on solution samples, and x-ray tomography of whole cells. In addition, chemists, geologists, and materials scientists have performed photo excited-state crystallography, high-pressure experiments mimicking down to the core-mantle boundary, and Laue micro diffraction exploring stress and strain. Many of the MX beamlines have undergone recent optics and endstation upgrades, producing higher flux and smaller spot sizes than ever before. Endstations include advanced features such as user-adjustable variable collimators, outstanding inline sample viewing, high speed detectors, highly automated sample mounting, stream-lined data collection and processing, and remote control capability. The beamline staff are known for their dedication to helping users and their friendly "can-do" attitude.

MacCHESS/Cornell University

#208

www.macchess.cornell.edu

MacCHESS ("Macromolecular diffraction facility at CHESS") is an NIH funded facility at the Cornell High Energy Synchrotron Source. In addition to supporting experiments in macromolecular crystallography and BioSAXS, MacCHESS conducts research in microcrystallography, high pressure cryocooling, BioSAXS development, and macromolecular dynamics. A1, monochromatic beamline, is suitable for general crystallography. The X-ray energy at A1 is currently 19.6 KeV (corresponding to a wavelength of 0.63 Å), due to the use of a diamond monochromator. F1 beamline, with its well-collimated monochromatic beam and Pilatus3 6M pixel array detector, is well suited for large complexes (including viruses). Tuned above the selenium absorption edge, it can also yield excellent SAD data when selenium is present. G1 is a high-flux multilayer BioSAXS station with rock solid beam stability, short exposures and high throughput. Data are automatically collected from two Pilatus detectors simultaneously (SAXS/WAXS), so that merged data cover a q range of 0.006 0.7 Å⁻¹. BioSAXS dedicated chem room is equipped with AKTA Size Exclusion Chromatography, two different spectrophotometers, state-of-the-art multi-angle and

dynamic light scattering (MALS/DLS) and refractive index detection (RI). Inline SEC-SAXS-MALS-DLS at the beamline is now available upon request, and has proven to be a powerful tool for resolving difficult aggregation and separation problems. Robotic sample loading is available at both crystallography (F1, A1) and BioSAXS (G1) stations. Microbeam with a focal spot size of 18-20 microns and a 10 fold increase in beam intensity is available at all crystallography beamlines upon request. Users interested in protein crystallography and/or BioSAXS experiments may apply for time using the on-line CHESS application process. Visit <https://userdb.chess.cornell.edu>.

MiTeGen, LLC

#308

www.mitegen.com

Because our customers' research is important, we provide innovative tools and solutions that measurably improve the ease, reproducibility, and quality of experiments. MiTeGen engineers, manufactures, and distributes a full range of the leading products for crystallography. Our customers include academic, medical, pharmaceutical, and government laboratories in over 45 countries.

Molecular Dimensions Inc

#211

www.moleculardimensions.com

Molecular Dimensions founded in 1998 is a world leading supplier of screens, reagents and instrumentation for protein structure determination by X-ray crystallography. As a result of worldwide research collaborations, Molecular Dimensions has introduced over 100 intelligent solutions for: Protein Expression; Crystal growth screening; Custom screens and reagents; Crystal growth plates; Cryocrystallography; Crystal growth storage; Analytical instrumentation. In just one year crystallographers have benefited from new hanging drop kits, UV Microscopes, Bicelle screening, Nucleation analysis, Membrane protein additives, Trace fluorescence, Calixarene additives, Labelling media, Expression optimization, Counter diffusion screening, HT in situ LCP, Nucleic acid screening, Animal product free

expression media, LCP screening. Working with crystallographers for crystallographers.

NatX-ray

#412

www.natx-ray.com

NatX-ray (located in the Grenoble area, France and San Diego, California, USA) specializes in the development, manufacturing and sale of automated X-ray crystallography solutions such as the G-Rob™ system.

NatX-ray also distributes consumable products such as phasing kits and compounds, crystallization plates and other crystallography products for laboratories and synchrotrons, in partnership with Greiner, Mitegen LLC, Crystal Positioning Systems, Inc and Jena.

NatX-ray is exclusive distributor for the US, Canada and Mexico of Greiner CrystalQuick X™, a 96 well plate especially developed for in situ screening. Featuring: posters, flyers and other commercial support; consumable samples and videos on PCs

Oxford Cryosystems Inc.

#209

www.oxcryo.com

Oxford Cryosystems is a market-leading manufacturer of specialist scientific instrumentation and software. The origins of the company lie in the design and manufacture of the original Cryostream Cooler in 1985, which immediately became the system of choice for cooling samples in X-ray diffraction experiments. The range of products for use in sample cooling has now expanded to include liquid-free systems such as our Cobra, helium coolers and specially adapted systems for use with powder diffractometers such as our new liquid-free Chimera with a temperature range of 80- 55 K. Today the company is considered to be the global market leader in X-ray diffraction sample cooling. In addition, our software brand, Crystallographica, offers both free software for crystallography teaching as well as one of the best-known search-match programs, Crystallographica Search Match.

Panalytical**#414**www.panalytical.com

Get insight with PANalytical, the pioneers and innovators in the technology fields of X-ray diffraction, X-ray fluorescence, Near Infrared, and sample prep for XRF/ICP/AA. Our flagship diffractometer Empyrean leads in data quality for applications ranging from pair distribution function (PDF) analysis, in-situ energy storage materials analysis, to computed tomography. Our new Benchtop system Aeris gives superb data quality allowing structure solution analysis. Visit PANalytical booth 414.

PROTO**#401**www.protoxrd.com

PROTO Manufacturing is a leading provider of x-ray diffraction (XRD) systems and services. Our AXRD Benchtop powder diffractometer provides a low-cost alternative that can meet the challenges of even the most demanding x-ray diffraction material investigation. The AXRD Benchtop will bring years of convenience and value in a compact, easy to maintain system

RCSB PDB**#210**www.pdb.org & kb.psi-structuralgenomics.org

RCSB PDB (rcsb.org) and the PSI Structural Biology Knowledgebase (sbkb.org) are resources for researchers and students studying the biological macromolecules and their relationships to sequence, function, and disease. RCSB PDB provides access to the PDB archive, while the PSI SBKB is a portal to structures, models, methods and more. Visit to learn about the wwPDB Common Deposition and Annotation System and new tools offered by RCSB PDB

Rigaku/Oxford Diffraction**#319**www.rigaku.com

Rigaku Oxford Diffraction combines the expertise of single crystal groups from Rigaku and the former Oxord Diffraction group to provide you with high quality instrumentation and software for X-ray crystallography and small angle X-ray scattering experiments. The goal of this new synergistic organization is to

provide tools which drive discoveries and increase our understanding of the universe at a molecular level. Our products include instrumentation and software for chemical crystallography, macromolecular crystallography and biological solution scattering. Additionally, our group includes Rigaku Reagents, which provides reagents and tools for macromolecular crystallization and cryo-crystallography. Rigaku Oxford Diffraction supports its products with expertly trained engineers and scientists who are dedicated to providing high-quality service through personal accountability and professional commitment to our customers. For more information on Rigaku Oxford Diffraction products, please visit www.rigaku.com.

Southeast Regional Collaborative Access Team (SER-CAT)

www.ser-cat.org

#218

SER-CAT, a crystallographic research facility at the Advanced Photon Source, Argonne National Laboratory, provides dedicated synchrotron access to an ID and BM beamline for its 21 participating member institutions and 4 associate user groups. General Users are also accepted by application through the APS. Please visit www.ser-cat.org for additional information

STOE & Cie GmbH

#219

www.stoe.com

STOE, originally founded in 1887, to manufacture equipment for the optical analysis of crystals, has been a pioneer in powder and single crystal X-ray diffraction since the 1960's, e.g. STOE invented and patented the transmission geometry technique for Powder XRD as well as, for single crystals, produced the first pixel detector XRD system with an open Eulerian cradle. STOE is based in Darmstadt, Germany, and keeps the R&D, software programming, electrical and mechanical engineering and production all in house, allowing STOE to provide customers with standard as well as individual solutions. Whenever it comes to quality, STOE accepts no compromises. This high-level of detail is what sets STOE apart. STOE is the partner in X-Ray Diffraction to crystallographers, chemists, material scientists and pharmacists all over the world.

Thermo Fisher Scientific**#410**www.fei.com

Thermo Fisher Scientific is the leading provider of electron microscopes and Cryo-Transmission Electron Microscopes (cryo-TEM's), which are used for protein structure determination. In addition to the microscopes themselves we also offer cryo-TEM sample preparation equipment, advanced electron detectors, as well as various software packages for automated data acquisition.

TTP LabTech Ltd.**#309**www.ttplabtech.com

TTP Labtech's popular mosquito® range offers versatile and robust nanoliter pipetting for protein crystallography irrespective of liquid viscosity. mosquito LCP adds cubic phase dispensing with active humidity control for membrane proteins. Package with dragonfly® crystal for fast and reproducible optimization of crystallization hits designed in our intuitive licence free software!

Xenocs**#402**www.molmexscientific.com

Molmex Scientific Inc. has been a leader in the field of Small Angle X-ray Scattering (SAXS) for over 2 decades, featuring the Ganesha from SAXSLAB with a moving 2D detector in vacuum. We offer a versatile platform for materials structure analysis including Ultra-SAXS for length scale probes to 5microns, surface structure using Grazing Incidence SAXS and a robotic sampling system for Protein Solution Scattering. We are now distributors of Dynamic and Static Light Scattering instrumentation by industry pioneer LS Instruments from Switzerland. Their products are highlighted by state-of-the-art 3D cross-correlation DLS and Diffusing Wave Spectroscopy (DWS) for Micro-Rheology.

XtalConcepts GmbH**#217**www.xtal-concepts.de

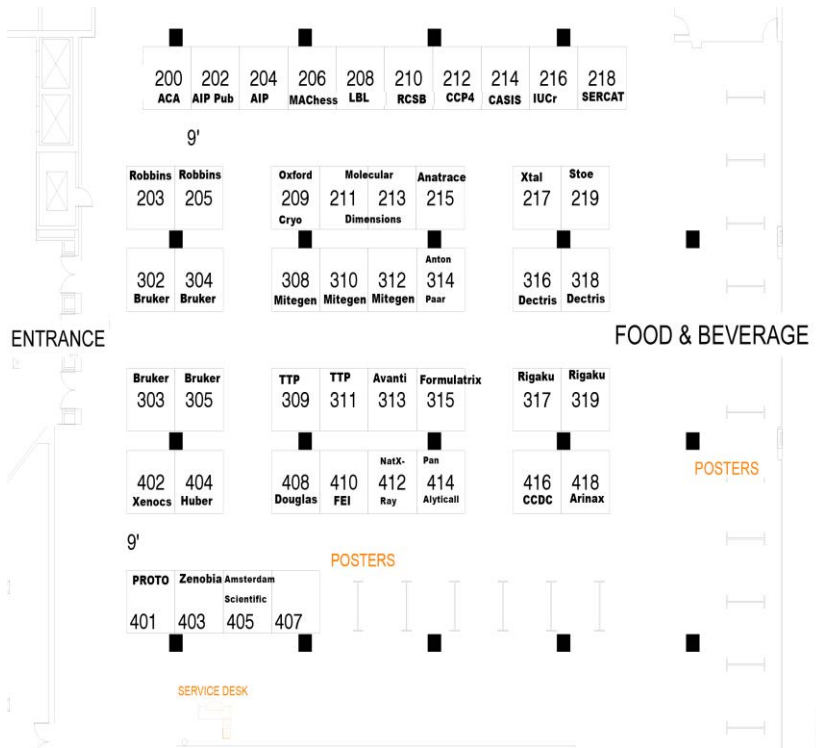
XtalConcepts designs and distributes instruments for nano particle characterization and size determination, particularly using in situ dynamic light scattering (DLS) and fluorescence techniques. Our versatile instruments offer various applications in many different sample containers like microfluidics, capillaries, especially designed to investigate biological macromolecules. Nucleation can be detected non-invasively in standard SBS-crystallization plates for optimization of high throughput crystallization.

Zenobia Therapeutics**#403**www.zenobiafragments.com

Express-Zen-Core288™ for x-ray: Crystallographic screening was first introduced in 2000 by Zenobia co-founder, Vicki Nienaber, Ph.D. (Nienaber et al., Nature Biotechnology) as a method to screen for weakly binding ligands and obtaining the x-ray structure in parallel. Since its introduction, there have been many advancements in robotics, x-ray data collection and processing making it efficient and profitable to screen directly with crystallography. To facilitate this resurgence in crystallographic screening, Zenobia is excited to introduce its new Express-Zen-Core288™ screening kit designed specifically for x-ray.

Hyatt Regency New Orleans

Storyville Hall



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