

***FiberNet* Fiber Diffraction Workshop**  
**Argonne National Laboratory, Chicago, IL, October 21-23, 2004**

**Thursday, 21 October**

morning: APS orientation for new users  
Orientation (see below) is required before taking part in the Saturday workshop.  
Lunch (not included) is available at the Guest House or the Argonne cafeteria.

**Steering Committee meeting 11:00 – 12:45, with box lunches**

1:15 welcome (Gerald Stubbs, chairman, *FiberNet*)  
1:45 R. Chandrasekaran (Purdue University)  
*Fiber diffraction and biopolymer architecture*  
2:15 Joseph Orgel (Rosalind Franklin University)  
*Fiber diffraction of native connective tissues and the sub-fibrillar structure of collagen type I*  
2:45 Gerald Stubbs (Vanderbilt University)  
*Fiber diffraction from flexible filamentous viruses*  
3:15 break  
3:30 FiberNet software panel discussion (Wen Bian, Gerald Stubbs)  
4:30 Kenn Gardner (Dupont)  
*Microbeam studies of two keratin systems*  
5:00 Lee Makowski (Argonne National Laboratory)  
*Towards the use of wide-angle solution scattering for the determination of protein fold*  
5:30 posters  
6:30 dinner (included in registration) at the Guest House

**Friday, 22 October**

8:45 introduction to APS (Tom Irving, director, *BioCAT*)  
9:15 CCP13 software workshop (John Squire, Joseph Orgel)  
10:45 break  
11:00 Tom Irving (Illinois Institute of Technology)  
*Time-resolved x-ray diffraction studies of indirect flight muscle of living Drosophila melanogaster*  
11:30 John Squire (Imperial College, London)  
*New insights into muscle structure from synchrotron x-ray diffraction*  
12:00 box lunch (included in registration)  
1:30 specimen preparation panel discussion (Amy Kendall, R. Chandrasekaran, Kenn Gardner)  
2:30 Paul Langan (Los Alamos National Laboratory)

- Neutron and synchrotron X-ray diffraction studies of cellulose fibers*
- 3:00 Trevor Forsyth (Institut Laue Langevin)  
*Fibre diffraction with x-rays and neutrons*
- 3:30 break
- 3:45 Jianpeng Ma (Baylor College of Medicine)  
*Modeling protein structures using SAXS data*
- 4:45 BioCAT tour and sector orientation (David Gore)
- 6:30 dinner (included in registration) at the Guest House

### **Saturday, 23 October**

- 9:00 data collection workshop at BioCAT (participants *must* have completed APS orientation and sector orientation)
- 12:00 closing remarks (Gerald Stubbs)

A box lunch is available on Saturday if ordered with registration.

There will be an opportunity for participants to collect data from their own specimens on Saturday afternoon and night. If you wish to do this, please contact Clareen Krolik **as soon as possible**, and make sure that you are registered as a user (see Thursday morning).

Questions about the program can be directed to Gerald Stubbs (Vanderbilt), [gerald.stubbs@vanderbilt.edu](mailto:gerald.stubbs@vanderbilt.edu), 615 322 2018, fax 615 343 6707, or Tom Irving (IIT and BioCAT), [irving@biocat1.phys.iit.edu](mailto:irving@biocat1.phys.iit.edu), 312 567 3489 , fax 312 567 3494

Orientation must be arranged in advance: contact Clareen Krolik (BioCAT), [krolik@bio.aps.anl.gov](mailto:krolik@bio.aps.anl.gov), 630 252 0549, fax 630 252 0545

For more information on orientation,  
go to <http://www.aps.anl.gov/>  
go to "User Info"  
go to "Get required training"  
go to "User training requirements and courses"