



# The SER-CAT SPECTRUM

A Biannual Newsletter of the Southeast Regional Collaborative Access Team • Summer 2004

## Director's Message

Bi-Cheng Wang



Summer has arrived, and it seems like just yesterday that we at SER-CAT were planning our goals for 2004. Though time has flown by, it has been a very productive time for the SER-CAT program, and I am pleased to report that we have reached several milestones since our last newsletter.

Our last board meeting in March was held at the University of Alabama at Birmingham, in conjunction with our second symposium, "Synchrotrons and Structural Biology," hosted by Dr. Craig Smith and other staff members at the UAB's Center for Biophysical Sciences and Engineering. We truly appreciate Craig's vision and the hard work put forth by him and his staff to make this happen. Both events were very productive and enjoyable to our members, and we plan on following this same format in upcoming years. In fact, St. Jude Children's Research Hospital has already agreed to host the next symposium. An article on this year's symposium, submitted by Craig Smith, is included in this issue.

There are several achievements that I would like to recognize since our last newsletter. First, this year, we welcomed our first industrial member to SER-CAT. I am pleased to announce that The Procter & Gamble Company joined our membership in February and is already actively participating in the direction of our program. Second, the "SER-CAT Science Committee" was recently formed to recognize the scientific achievements of our users and develop plans to keep productivity at an optimum level. Last, but not least, we have reached an important milestone, as our ID beamline has now been declared operational by the APS.

In addition to the membership and program achievements, our technical staff has been hard at work making remote participation a reality at SER-CAT. Work continues on SERGUI, an interactive graphical user interface for data collection, as well as the incorporation of AccessGrid, which will be debuted at the ACA meeting in July.

Please read on to discover details behind these activities and more. I hope you will enjoy this issue of *The SER-CAT Spectrum*. As always, we continue to look for more ways we can improve the benefits of SER-CAT membership. Feel free to contact us with any comments or suggestions on how we might better serve you. Thank you for reading, and have a wonderful summer!

## 22-ID Declared Operational



Stephen Foundling mounts a sample on the 22-ID beamline.

During the March 2004 SER-CAT Board Meeting, a unanimous vote was made to declare the 22-ID operational as of January 1, 2004, with the General User Program beginning in January 2005. A letter from Dr. J. Murray Gibson, Associate Laboratory Director at the APS, was received confirming SER-CAT's operational status and recognizing the remaining commissioning activities anticipated.

Once the General User Program goes into effect at SER-CAT, 25% of available beamtime on 22-ID will be allocated to general users. Every effort will be made to accommodate our institutional members during this transition. Concerns regarding available

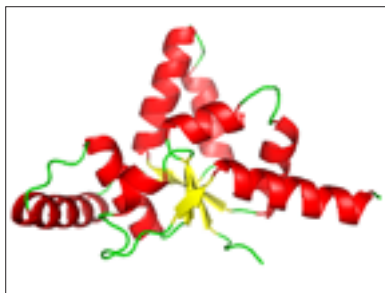
(Continued on Page 2)

## INSIDE THIS ISSUE:

|                                  |   |                                    |   |                   |   |
|----------------------------------|---|------------------------------------|---|-------------------|---|
| Director's Message               | 1 | Symposium Held at UAB              | 3 | Upcoming Meetings | 3 |
| 22-ID Declared Operational       | 1 | Publication Log on SER-CAT Website | 3 |                   |   |
| SER-CAT Science Committee Formed | 2 | SER-CAT at ACA Meeting             | 3 |                   |   |

22-ID Declared Operational, from Page 1

beamtime should be minimal, as members will still be able to take advantage of the BM beamline during its commissioning activities. In fact, many members are already taking advantage of the BM beamline, and it has already been used to solve a structure (see figure).



Structure of Vap C domain, courtesy of Peter Horanyi, University of Georgia

## SER-CAT Science Committee Formed

The SER-CAT Science Committee was recently formed to monitor scientific productivity at the beamline, including acknowledgements in publications. It will also establish a mechanism to recognize the best science at SER-CAT. Awards will be distributed annually to one researcher and one young scientist with the most significant scientific achievement related to SER-CAT. In addition, the award recipients will be recognized by having their name added to a permanent plaque with nameplates at the SER-CAT facility. The new committee is chaired by Assistant Director, John Rose. Below are more details on these awards and how to nominate one of your colleagues or students.

## SER-CAT Outstanding Science Award

The SER-CAT Science Committee is offering an award for outstanding science carried out at SER-CAT during the previous year. The Outstanding Science Award is open to any researcher or research group carrying out experimental activities at SER-CAT.

The award will be presented at the annual SER-CAT Symposium. The recipient of the award will also be invited to present a 40-minute lecture on his/her research related to the award at the symposium. In addition, the winner's name and institution will be recorded on the master plaque displayed at Sector 22.

### Nominations for this award must include the following:

- A one-page description of the work for which the award is proposed (*note SER-CAT must have played an important role in the work described*)
- A single publication related to the work published during the eligible year together with a statement describing the significance and impact of the work (*note SER-CAT must be properly acknowledged in the publication and related PDB files*)
- A current CV

- Names of two individuals that have agreed to write supporting letters
- The signature of the nominator

## SER-CAT Young Investigator Award

The SER-CAT Science Committee is offering a Young Investigator Award to recognize an important technical or scientific accomplishment by a young investigator (within two years of his/her Ph.D. degree) at, or of benefit to, SER-CAT. The award is open to both post-doctoral and senior graduate students from any institution carrying out experimental activities at SER-CAT.

The award will be presented at the annual SER-CAT Symposium. The recipient of the award will also be invited to present a 20-minute lecture on his/her research related to the award at this the symposium. In addition, the winner's name and institution will be recorded on the master plaque displayed at Sector 22.

### Nominations for this award must include the following:

- A one-page description of the work for which the award is proposed (*note that SER-CAT must have played an important role in the work described*)
- A single publication related to the work together with a statement describing the significance and impact of the work
- A current CV
- For student nominees, a statement of career goals and how they envision the role of the APS in their future
- Names of two individuals who have agreed to write supporting letters
- The signature of the nominator

*Please note: It is the responsibility of the nominators to request supporting letters, which should be sent under separate cover.*

Complete packages (nominating information and letters) for both the Outstanding Science and Young Investigator awards must be received **no later than January 15, 2005**.

Nominating packages and letters should be sent to:

Prof. John P. Rose  
Chairman SER-CAT Science Committee  
Room B204B Davison Life Sciences Complex  
University of Georgia  
Athens, GA 30602

## "Synchrotrons and Structural Biology" Symposium at UAB

The first SER-CAT symposium was held two years ago at the inauguration of the ID beamline at APS. Following the success of that event, it was decided to begin a series of symposiums, to be sponsored by and held at the locations of the different members of the SER-CAT consortium. This second symposium was held at the Center for Biophysical Sciences and Engineering located at the University of Alabama at Birmingham (UAB).

The symposium title was "Synchrotrons and Structural Biology". It was designed to bring the scientists who made the beamlines together with scientists who are users of the beamlines, to provide a two-way forum for the enhancement of capabilities and productivity at the SER-CAT sector. It was also intended to encourage mutual understanding, support, and collaboration within the organization. In that spirit, 50 attendees converged on the University of Alabama campus on a beautiful spring day to hear 11 speakers. The morning session was devoted primarily to beamline topics, and the afternoon dealt more with structural biology resulting from synchrotron data.



Attendees of the 2<sup>nd</sup> SER-CAT Symposium

The morning began with welcoming comments from Larry DeLucas, the director of the host institution, the UAB Center for Biophysical Sciences and Engineering. B.C. Wang (University of Georgia), the director of SER-CAT, followed with a welcome and introduction to the symposium topics. Following the talks there was a poster session.

The symposium ended but was followed that evening by a general users meeting to allow discussion between the SER-CAT operations team and SER-CAT membership users of the facility. The next day the SER-CAT governing board met where Stephen White volunteered to host the next SER-CAT symposium at St. Jude Children's Research Hospital. Thank you, Stephen.

Thanks also to the staff and support personnel, both from the University of Alabama and the University of Georgia, who helped make this second symposium a success. Also, thanks to the wonderful speakers who made the symposium possible.

■ The preceding was an excerpt from an article by Craig D. Smith (smith@cbse.uab.edu). View the entire article at [www.ser-cat.org](http://www.ser-cat.org).

## Publication Log on SER-CAT Website

The APS uses the number of publications as a guideline to judge scientific productivity, and in fact the continued operation of our beamlines will largely depend on the number of publications recognized in the APS database. To that end, as requested at the last Board meeting, a publication log and PDB log have been added to our website, [www.ser-cat.org](http://www.ser-cat.org). Six publications referencing 22-ID have been added to the APS database since our last newsletter. If you have a publication that should be listed, please check our list at [www.ser-cat.org](http://www.ser-cat.org), and click on "publications." *Please don't forget to acknowledge us – our success depends on you!* Instructions on how to acknowledge SER-CAT and the APS in your publications are also included in this portion of the website.

If you would like to suggest any changes to make the site more informative or easier to navigate, please e-mail Lisa Horanyi at [LHORANYI@UGA.EDU](mailto:LHORANYI@UGA.EDU).

## SER-CAT at ACA Meeting in Chicago

For the third consecutive year, SER-CAT will host an exhibit at the ACA meeting. This year we will have an interactive element, as we debut our teleconferencing capabilities through AccessGrid. The meeting will be held at the Hyatt Regency Hotel and Conference Center in downtown Chicago from Saturday, July 17 to Thursday, July 22, 2004. Please stop by and see us at Booth # 326.

## Upcoming Meetings

The next SER-CAT Board Meeting has been tentatively set for Saturday, October 23, 2004, at the Argonne Guest House, Argonne, Illinois. The March 2005 SER-CAT Board Meeting will be held in conjunction with a scientific symposium, hosted by St. Jude Children's Research Hospital, in Memphis, Tennessee. Detailed information on both events will be posted at [www.ser-cat.org](http://www.ser-cat.org) and distributed to our members as it becomes available.

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*The SER-CAT Spectrum* is the biannual newsletter of the SER-CAT group. Additional information about SER-CAT and the Advanced Photon Source at Argonne National Laboratory can be found at our website [www.ser-cat.org](http://www.ser-cat.org) or by contacting the SER-CAT Administrative Office at 706-583-8243.

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## The *SER-CAT* Spectrum

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Peter Lindley (Retired from ESRF)  
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Florida State University  
Georgia State University  
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