

CURRICULUM VITAE**BI-CHENG WANG****(December 2012)**Personal:

Name: Bi-Cheng (B.C.) Wang

Address:Office: B204A, The Fred C. Davison Life Sciences Complex
Department of Biochemistry & Molecular Biology
120 Green Street
University of Georgia
Athens, GA 30602-7229

Phone: 706-542-1747(Office) 706-340-5036 (Mobile)

Fax: 706-542-3077

E-mail: wang@BCL1.bmb.uga.edu

Education:

Cheng Kung University, Taiwan

B.Sc. in Chemical Engineering 1960

University of Arkansas

Ph.D. in Chemistry 1968

California Institute of Technology

Postdoctoral 1968-1970

Professional Appointments:

Research Associate, University of Pittsburgh	07/70 - 05/71
Research Chemist, VA Medical Center, Pittsburgh, PA	05/71 - 04/86
Assistant Professor (Adjunct), University of Pittsburgh	10/74 - 12/78
Assistant Chief, Biocrystallography Laboratory, VA Medical Center, Pittsburgh, PA	01/76 - 04/86
Associate Professor (Adjunct), University of Pittsburgh	01/79 - 05/85
Professor (Adjunct), University of Pittsburgh	06/85 - 04/86
Professor, Department of Crystallography and Department of Biological Sciences, University of Pittsburgh	05/86 - 04/95
Professor (Adjunct), Institute of Molecular Biology, Academia Sinica, Taiwan, R.O.C.	04/90 - 12/92
Professor (Adjunct), University of Pittsburgh	05/95 - 05/00
Professor of Biochemistry and Molecular Biology, University of Georgia	05/95 - present
Eminent Scholar in Structural Biology (X-ray Crystallography), Georgia Research Alliance and University of Georgia	05/95 - present
Director, Southeast Regional Collaborative Access Team for Synchrotron beam lines at APS	10/97 - present
Director, Southeast Collaboratory for Structural Genomics	09/00 - present
Professor (Visiting), Tainjin Medical University, China	11/05 - present
Professor (Adjunct), Institute of Biophysics, Chinese Academy of Sciences, China	11/05 - present
Professor (Adjunct), College of Life Sciences, National Tsing Hua University, Taiwan	07/06 - present

Professional & Community Services:

Co-Editor, Crystallographic Reviews, Taylor & Francis	1984-1993
Program Chairman, Pittsburgh Diffraction Conference	1988
President, Pittsburgh Diffraction Society	1989
Chairman Search Committee Member, Department of Biological Sciences, Univ. of Pittsburgh	1989-1990
University Research Council Member, University of Pittsburgh	1989-1992
Project Leader, Crystallography Program, Institute of Molecular Biology, Academia Sinica, ROC	1990-1992
Scientific Review Committee Member, Biophysical Chemistry Study Section, NIH	1989-1993
Chair, Faculty Search Committee, Department of Biochemistry and Molecular Biology, UGA	1997
Member, Task Group for the Evaluation of NASA's Biotechnology Facility for the International Space Station	1999
Co-Chair, Faculty Search Committee, Department of Biochemistry and Molecular Biology, UGA	2001

Co-Director, ACA Summer School in Crystallography, University of Pittsburgh	1993-1996
Director, ACA Summer School in Crystallography, University of Georgia	1997–2001
Founding Director, Southeast Regional Collaborative Access Team for Synchrotron beamlines at Advanced Photon Sources, Argonne National Laboratory	1997-present
Director, Executive Board, Southeast Regional Collaborative Access Team	1999-present
Member, Scientific Advisory Board, Bruker AXS Inc.	2000-present
Member, Scientific Advisory Board, Institute of Biochemistry, Taiwan, Republic of China	2002-2004
Member, University Research Computing Committee, University of Georgia	2003-2009
Editor, The SER-CAT <i>SPECTRUM</i>	2003-2009
Member, Advisory Committee, Institute of Bioinformatics, University of Georgia	2003-2009
Member, Advisory Board, UGA Bioexpression & Fermentation Facility	2003-present
Member, Scientific Advisory Board, Institute of Biophysics, Chinese Academy of Science, China	2004-present
Member, Committee of Visitors, Life Science Program, US Department of Energy	2005
Member, Institute Laboratories Advisory Council, RIKEN Discovery Research Institute, Japan	2005-2005
Member, International Advisory Com., 2006 International Conference on Structural Genomics	2005-2006
Chair, External Scientific Advisory Committee, Center for Eukaryotic Structural Genomics	2005-present
Chair, Organizing Committee, 1 st Annual UK-Southeast USA Symposium on Structural Genomics and Proteomics of Membrane and Metalloproteins	2005-present
Coordinator (US), Global Initiative for Structural Proteomics (USA, UK, Canada, China)	2005-present
Member, Scientific Advisory Board, College of Life Sciences, Tsinghua University, Taiwan, ROC	2006-2006
Member, Scientific Review Committee, SPring-8 Center, RIKEN Harima Institute, Japan	2007-2007
Member, Scientific Advisory Board, 3D Biolaboratory Ltd Co, Beijing, China	2009-present
Member, University Review Committee, University of Georgia	2012-2013

Awards and Honors

Ramsey-Georgia Research Alliance Eminent Scholar in Structural Biology	May 1995
American Crystallographic Association 1998 Distinguished Service Award	July 1998
Recipient of the NIH Structural Genomics Pilot Center \$28.9 Million Grant, largest NIH award in the history of the University of Georgia	Oct 2000
IBM SUR Award	Nov 2001
Golden Magnolia Award for founding & serving the consortium from SER-CAT Executive Board	Mar 2007
Lamar Dodd Creative Research Award, University of Georgia	Mar 2008
American Crystallographic Association 2008 Patterson Award	June 2008
Distinguished Bulldog, Recognition during the UGA-UAB football game, University of Georgia	Sept 2008
Fellow of the American Crystallographic Association	June 2011

Research Interests:

Application of technologies developed during the NIH structural genomics pilot phase to form extended, interdisciplinary research collaborations with scientists in bioinformatics, molecular biology and other biomedically relevant fields. Current research interests include:

- Extended wavelength X-ray crystallography development and applications
- Diffraction methods for detecting the electronic state of atoms in biological molecules
- Sulfur-SAD approach in the direct determination of protein structures.
- Structure of the human oxytocin receptor, a GPCR membrane protein.
- Structures of memory proteins and odorant receptors.
- Structure-function studies of selected singleton proteins.

Research Supports received:

Purification and Crystallization of <i>E. coli</i> RNA Polymerase, PI, Pitt Research & Services Foundation, 1978	\$10,000
X-ray Structures of Ricin, Abrin, Bowman-Birk Inhibitors, PI, NIH, 1984-1987	\$239,252
Area Detector for Protein Data Collection in Pittsburgh, PI, NIH Shared Instrumentation Grant, 1985-1986	\$219,000
Structural Studies of Histone, Co-PI, NIH, 1988-1991	\$135,203

Area Detector for Macromolecular Crystallography, Co-PI, NIH Shared Instrumentation Grant, 1992-1993	\$264,649
Structure of Glutamine Binding Proteins by Crystallography, Co-PI, NSF, 5/1/89 - 6/30/94	\$128,965
Crystallographic Studies of HIV Transactivation Protein, TAT, Co-PI, Army Research, 5/24/93 - 4/30/96	\$22,000
Study of Neurophysin-Hormone Systems by X-Ray Diffraction, PI, NIH, 4/1/79-3/31/86	\$627,382
Structure-Function of Neurophysin-Hormone Systems, PI, NIH, 2/1/88 - 1/31/96	\$704,027
Site-Specific Recombination by L5 Integrase, Co-PI, NIH, 9/1/93 - 8/31/97	\$190,000
Structure-Function of Glutathione S-Transferases, PI, NIH, 1/1/94 - 12/31/97	\$675,460
Structure-Function Relationships of RNA Polymerases, PI, NIH, 7/1/88 - 6/30/98	\$1,440,275
Structural Characterization of Liver Aldehyde Dehydrogenases, Co-PI, NIH, 7/1/90 - 11/31/00	\$823,380
Equipment Support for UGA Crystallography Laboratory, PI, Georgia Research Alliance, 7/1/95-6/30/00	\$2,000,000
Equipment Support for Structural Genomics Project, PI, Georgia Research Alliance, 7/1/1-6/30/04	\$4,750,000
Structural Study of Poly(hydroxyalkanoate) Synthase Responsible for Biobased Polymer Production Co-PI, (Daniel K.Y. Solaiman, PI), USDA/NRI, 10/1/03 - 9/30/06	\$24,750
Southeast Collaboratory for Structural Genomics, PI, NIH/NIGMS, 10/1/00-8/31/07	\$28,897,254
Long Wavelength Sulfur Phasing Data Collection Techniques at SER-CAT, PI, Pfizer Inc. 10/1/07 – 7/20/209	\$4,761
Mannosidases in Glycoprotein Biosynthesis and Catabolism, Co-PI, (Kelley Moremen, PI), NIH 5/1/00 - 4/30/09	\$72,030
Acquisition of a Microdiffractometer for SER-CAT. Co-PI (John Rose, PI), 01/06/2009 – 12/31/2010	\$420,000
Personnel Assignment for Gerold Rosenbaum at SBC-CAT, PI, ANL, 04/01/2004 – 12/31/2011	\$723,547
UGA-Trellis Antibody-HA Crystallography Project, PI, 4/1/11 – 6/30/11	\$72,577
Phase II SER-CAT Optimization: Acquisition of a Next Generation Area Detector, PI, NCRR 7/1/10 – 6/60/13	\$1,472,000
Southeast Regional Collaborative Access Team (SER-CAT) PI, Various sources, 9/1/99 - 9/30/13	\$40,121,157

Patent Applied and Issued:

- US Patent #7,582,475, issued 9/1/09: "Vectors and Methods for High Throughput Co-Expression."
- US Regional Patent Application #12/501,666: "Vectors and Methods for High Throughput Co-Expression."
- US Patent Application #04/05933 "High throughput methods for determining electron density distribution and structures of crystals"
- US Patent Application #03/21988 "Monitoring the signal-to-noise ratio in X-ray diffraction data"

Major Thesis Advisor for Past Graduate Students (and their Current Positions):

- Daniel S.C. Yang, Ph.D. in Crystallography, 1983. (Professor, McMaster University, Canada)
- Zhang-Bao Xu, Ph.D. in Crystallography, 1986. (Senior Research Scientist, Wyeth-Ayerst Research, Princeton, NJ)
- Laura L. Clancy, M.S. in Crystallography, 1986. (Science Tech. Specialist, Central Connecticut State Univ.)
- Ping Chen, Ph.D. in Crystallography, 1989. (Senior Research Scientist, Agouron Pharmaceuticals. San Diego, CA)
- Yong Je Chung, Ph.D. in Crystallography, 1989. (Professor, Chung Buk University, Korea)
- Liqing Chen, Ph.D. in Crystallography, 1991. (Research Associate Professor, UAH)
- Rui Sousa, Ph.D. in Biological Sciences, 1992. (Professor, University of Texas)
- Chwan-Deng Hsiao, Ph. D. in Crystallography, 1993. (Professor, Institute of Molecular Biology, Taiwan)
- Jian Hua Fu, Ph. D. in Crystallography, 1994. (Assistant Professor, Yale University)
- Yuh-Ju Sun, Ph. D. in Crystallography, 1995. (Associate Professor, Tsing-Hua University, Taiwan)
- Ke Zeng, Ph. D. in Crystallography, 1995 (Research Associate, Research Institute of Scripps Clinic)
- Ping-Lin Ong, Ph.D. in Biological Sciences, 1997 (Associate Professor, Taiwan)
- Bing Hu, Ph.D. in Crystallography, 1997 (Research Staff, St. Louis)
- Chia-Kuei Wu, Ph.D. in Crystallography, 1999 (Senior Scientist, Synergy America, Inc., MD, USA)
- Chung Jung Chen, Ph.D. in Crystallography, 1999 (Staff Scientist, Synchrotron Radiation Research Center, Taiwan)
- Vasundara Srinivasan, Ph.D. in Biochemistry & Mol. Biol., 2000 (Research Associate, Germany)
- Florian Schubot, Ph.D. in Biochemistry & Mol. Biol., 2001 (Assistant Professor, Virginia Tech)

Lu Deng, Ph.D. in Chemistry, 2004 (Research Associate, NIST)
Lei (Lisa) Huang, MS in Biochemistry and Molecular Biology, 2004 (Research Staff)
Jeff Habel, Ph.D. in Biochemistry & Mol. Biol., 2005 (Research Scientist, Advanced Light Source)
Peter Horanyi, Ph.D. in Biochemistry & Mol. Biol., 2005 (Research Associate, University of Virginia)
Hua Yang, Ph.D. in Biochemistry & Mol. Biol., 2007 (Research Associate, Centers for Disease Control)
Annapoorani Ramiah, MS in Chemistry, 2007.
Min Zhao, Ph.D. in Biochemistry & Mol. Biology, 2007 (Research Associate, Scripps Florida)
Jinyi Zhu, Ph.D. in Chemistry, 2008 (Research Associate, Moffitt Cancer Institute)
James Tucker Swindell, Jr. 2010 (Physicist, Wide Area Surveillance Team, U.S. AMSAA)
Dayong Zhou, 2011

Thesis Advisor for Current Graduate Students:

Research Supervisor for UGA Undergraduate Students:

Sidney Lance Hendrix (Biochemistry and Molecular Biology, for 2 terms)
Alex Nguyen (Biochemistry and Molecular Biology, for 2 terms)
Babatunde Olubajo (Agriculture and Environment Sciences, for 3 terms)
Ryan Shanks (Biochemistry and Molecular Biology, for 3 terms)
Christine Roberts (Biochemistry and Molecular Biology, for 3 terms)
Jodi-Ann Wiggan (Biochemistry and Molecular Biology, for 2 terms)
Rebecca Smith (Biochemistry and Molecular Biology, for 2 terms)
Sonal E. Harbaran (Biochemistry and Molecular Biology, for 2 terms)
Quentin Florence (Biochemistry and Molecular Biology, for 3 terms)
Jessie Chang (Biochemistry and Molecular Biology, for 3 terms)
Jimmy Nguyen (Biochemistry and Molecular Biology, for 2 terms)
Jenny Huang (Biochemistry and Molecular Biology, for 2 terms)
Janice Hsieh (Biochemistry and Molecular Biology, for 1 term)
Han Na You (Biochemistry and Molecular Biology, for 1 term)
Brandon Morrow (Biochemistry and Molecular Biology, for 1 term)
Yasin Rasheed (Biochemistry and Molecular Biology, for 2 term)
Yusuf Olanrewaju (Biochemistry and Molecular Biology, for 2 term)

Teaching Experiences:

Principal Lecturer (1978, 1980), Dept. of Chemistry, Duquesne University, Graduate Course in X-ray Crystallography.
Principal Lecturer (1986-1987), Dept. Crystallography, University of Pittsburgh, Graduate course in Introductory Crystallography.
Guest Lecturer (1988), Dept. of Biological Sciences, Carnegie Mellon University, Lecture on Determination of Protein Structure by X-ray Diffraction in graduate course on Advanced Biochemistry.
Principal Lecturer (1986-1990), Dept. of Biological Sciences, University of Pittsburgh, Protein Purification, Part I of graduate course in Biochemistry.
Guest Lecturer (1990), Graduate Institute of Microbiology, College of Medicine, National Taiwan University, Lecture on Macromolecules, Nucleic Acids and Chromosomes, graduate course in Molecular Genetics.
Principal Lecturer (1992), Academia Sinica Summer School on X-ray Crystallography, Taipei, Taiwan; graduate course in Macromolecular Crystallography.
Guest Lecturer (1992-1995), Dept. of Molecular Genetics and Biochemistry, Medical School, University of Pittsburgh, lectures in Protein Crystallography, graduate course in Protein Structures and Functions.
Principal Lecturer (1991-1994), Dept. of Biological Sciences, University of Pittsburgh, X-ray Crystallography, Part II of graduate course in Current Topics in Molecular Biophysics.
Lecturer and co-Director (1993-2002), American Crystallographic Association Crystallography Summer School, Lectures in Macromolecular Crystallography.

Principal Lecturer (1986-1995), Dept. of Crystallography, University of Pittsburgh, Graduate course in Protein Crystallography.

Principal Lecturer (1997-2004), Dept. of Biochemistry and Molecular Biology, University of Georgia, Graduate course in Protein Crystallography.

Co-Lecturer (1999-2004), Dept. of Biochemistry and Molecular Biology, University of Georgia, Advanced Physical Chemistry.

Co-Lecturer (2006, 2008), Dept. of Biochemistry and Molecular Biology, University of Georgia, Graduate course in Protein Crystallography.

Publications - Peer reviewed journals:

1. Zhu, J.-Y.; Fu, Z.-Q.; Chen, L.; Xu, H.; Chrzas, J.; Rose, J.; Wang, B.C. The crystal structure of the *Archaeoglobus fulgidus* orphan ORF AF1382 determined by sulfur-SAD from a moderately diffracting crystal. *Acta Crystallogr* **2012**, D68, 1242-1252.
2. Florence, Q.; Wu, C.-K.; Habel, J. Swindell, T, II; Wang, B.C.; Rose, J. The crystal structure of Augmenter of Liver Regeneration crystallized in the presence of 50 mM CdCl₂ reveals a novel Cd₂Cl₄O₆ cluster that aids in crystal packing. *Acta Crystallogr* **2012**, D68, 1128-1133.
3. Yoshikawa S, Kukimoto-Niino M, Parker L, Handa N, Terada T, Fujimoto T, Terazawa Y, Wakiyama M, Sato M, Sano S, Kobayashi T, Tanaka T, Chen L, Liu ZJ, Wang BC, Shirouzu M, Kawa S, Semba K, Yamamoto T, Yokoyama S., Structural basis for the altered drug sensitivities of non-small cell lung cancer-associated mutants of human epidermal growth factor receptor. *Oncogene*. **2012**, Feb 20. doi: 10.1038/onc.2012.21. [Epub ahead of print].
4. Liu, Z. J.; Chen, L.; Wu, D.; Ding, W.; Zhang, H.; Zhou, W.; Fu, Z. Q.; Wang, B. C., A multi-dataset data-collection strategy produces better diffraction data. *Acta Crystallogr* **2011**, A 67, (Pt 6), 544-549
5. Titushin, M., Feng, Y., Stepanyuk, G., Li, Y., Markova, S, Golz, S., Wang, BC, Lee, J., Wang, J., Vysotski, E. & Liu, Z. J. (2010) NMR derived topology of a GFP-photoprotein energy transfer complex. *J. Biol Chem* 285, (52), **2010**, 40891-900.
6. Huether, R.; Liu, Z. J.; Xu, H.; Wang, B. C.; Pletnev, V. Z.; Mao, Q.; Duax, W. L.; Umland, T. C., Sequence fingerprint and structural analysis of the SCOR enzyme A3DFK9 from *Clostridium thermocellum*. *Proteins* **2010**, 78, (3), 603-13.
7. Yang, H.; Lipscomb, G. L.; Keese, A. M.; Schut, G. J.; Thomm, M.; Adams, M. W.; Wang, B. C.; Scott, R. A., SurR regulates hydrogen production in *Pyrococcus furiosus* by a sulfur-dependent redox switch. *Mol Microbiol*. **2010**, 77, 1111-1122.
8. Su, J., Li, Y., Shaw, N., Zhou, WH, Zhang, M., Xu, H., Wang, B. C., Liu, Z. J. Crystal structure of a novel non-Pfam protein PF2046 solved using low resolution B-factor sharpening and multi-crystal averaging methods. *Protein & Cell* **2010**, 1(5): 453-458.
9. Chung, D. H.; Min, Z.; Wang, B. C.; Kushner, S. R., Single amino acid changes in the predicted RNase H domain of *Escherichia coli* RNase G lead to complementation of RNase E deletion mutants. *Rna* **2010**, 16, 7, 1371-85.
10. Sarma, G. N.; Kinderman, F. S.; Kim, C.; von Daake, S.; Chen, L.; Wang, B. C.; Taylor, S. S., Structure of D-AKAP2:PKA RI complex: insights into AKAP specificity and selectivity. *Structure* **2010**, 18, (2), 155-66.
11. Wang, H.; Takemoto, C.; Akasaka, R.; Uchikubo-Kamo, T.; Kishishita, S.; Murayama, K.; Terada, T.; Chen, L.; Liu, Z. J.; Wang, B. C.; Sugano, S.; Tanaka, A.; Inoue, M.; Kigawa, T.; Shirouzu, M.; Yokoyama, S., Novel dimerization mode of the human Bcl-2 family protein Bak, a mitochondrial apoptosis regulator. *J Struct Biol* **2009**, 166, (1), 32-7.
12. Stepanyuk, G. A.; Liu, Z. J.; Vysotski, E. S.; Lee, J.; Rose, J. P.; Wang, B. C., Structure based mechanism of the Ca(2+)-induced release of coelenterazine from the Renilla binding protein. *Proteins* **2009**, 74, (3), 583-93.
13. Bahti, P.; Chen, S.; Li, Y.; Shaw, N.; Zhang, X.; Zhang, M.; Cheng, C.; Song, G.; Yin, J.; Zhang, H.; Che, D.; Abbas, A.; Xu, H.; Wang, B. C.; Liu, Z. J., Purification, crystallization and preliminary crystallographic analysis of the non-Pfam protein AF1514 from *Archeoglobus fulgidus* DSM 4304. *Acta Crystallogr Sect F Struct Biol Cryst Commun* **2008**, 64, (Pt 2), 91-3.
14. Li, Y.; Bahti, P.; Shaw, N.; Song, G.; Chen, S.; Zhang, X.; Zhang, M.; Cheng, C.; Yin, J.; Zhu, J. Y.; Zhang, H.; Che, D.; Xu, H.; Abbas, A.; Wang, B. C.; Liu, Z. J., Crystal structure of a novel non-Pfam protein AF1514 from *Archeoglobus fulgidus* DSM 4304 solved by S-SAD using a Cr X-ray source. *Proteins* **2008**, 71, (4), 2109-13.

15. Perwez, T.; Hami, D.; Maples, V. F.; Min, Z.; Wang, B. C.; Kushner, S. R., Intragenic suppressors of temperature-sensitive rne mutations lead to the dissociation of RNase E activity on mRNA and tRNA substrates in *Escherichia coli*. *Nucleic Acids Res* **2008**, *36*, (16), 5306-18.
16. Shaw, N.; Tempel, W.; Chang, J.; Yang, H.; Cheng, C.; Ng, J.; Rose, J.; Rao, Z.; Wang, B. C.; Liu, Z. J., Crystal structure solution of a ParB-like nuclease at atomic resolution. *Proteins* **2008**, *70*, (1), 263-7.
17. Stepanyuk, G. A.; Liu, Z. J.; Markova, S. S.; Frank, L. A.; Lee, J.; Vysotski, E. S.; Wang, B. C., Crystal structure of coelenterazine-binding protein from *Renilla muelleri* at 1.7 Å: why it is not a calcium-regulated photoprotein. *Photochem Photobiol Sci* **2008**, *7*, (4), 442-7.
18. Stepanyuk, G. A.; Liu, Z. J.; Vysotski, E. S.; Lee, J.; Rose, J. P.; Wang, B. C., Structure based mechanism of the Ca(2+)-induced release of coelenterazine from the *Renilla* binding protein. *Proteins* **2008**, July 24. (Epub ahead of print).
19. Stepanyuk, G. A.; Xu, H.; Wu, C. K.; Markova, S. V.; Lee, J.; Vysotski, E. S.; Wang, B. C., Expression, purification and characterization of the secreted luciferase of the copepod *Metridia longa* from Sf9 insect cells. *Protein Expr Purif* **2008**, *61*, (2), 142-8.
20. Xie, Y.; Takemoto, C.; Kishishita, S.; Uchikubo-Kamo, T.; Murayama, K.; Chen, L.; Liu, Z. J.; Wang, B. C.; Manzoku, M.; Ebihara, A.; Kuramitsu, S.; Shirouzu, M.; Yokoyama, S., Structure of the minimized alpha/beta-hydrolase fold protein from *Thermus thermophilus* HB8. *Acta Crystallogr Sect F Struct Biol Cryst Commun* **2007**, *63*, (Pt 12), 993-7.
21. Shimada, A.; Niwa, H.; Tsujita, K.; Suetsugu, S.; Nitta, K.; Hanawa-Suetsugu, K.; Akasaka, R.; Nishino, Y.; Toyama, M.; Chen, L.; Liu, Z. J.; Wang, B. C.; Yamamoto, M.; Terada, T.; Miyazawa, A.; Tanaka, A.; Sugano, S.; Shirouzu, M.; Nagayama, K.; Takenawa, T.; Yokoyama, S., Curved EFC/F-BAR-domain dimers are joined end to end into a filament for membrane invagination in endocytosis. *Cell* **2007**, *129*, (4), 761-72.
22. Shaw, N.; Zhao, M.; Cheng, C.; Xu, H.; Saarikettu, J.; Li, Y.; Da, Y.; Yao, Z.; Silvennoinen, O.; Yang, J.; Liu, Z. J.; Wang, B. C.; Rao, Z., The multifunctional human p100 protein 'hooks' methylated ligands. *Nat Struct Mol Biol* **2007**, *14*, (8), 779-84.
23. Shaw, N.; Cheng, C.; Tempel, W.; Chang, J.; Ng, J.; Wang, X. Y.; Perrett, S.; Rose, J.; Rao, Z.; Wang, B. C.; Liu, Z. J., (NZ)CH...O contacts assist crystallization of a ParB-like nuclease. *BMC Struct Biol* **2007**, *7*, 46.
24. Liu, Z. J.; Chen, H.; Shaw, N.; Hopper, S. L.; Chen, L.; Chen, S.; Cerniglia, C. E.; Wang, B. C., Crystal structure of an aerobic FMN-dependent azoreductase (AzoA) from *Enterococcus faecalis*. *Arch Biochem Biophys* **2007**, *463*, (1), 68-77.
25. Kondo, N.; Nakagawa, N.; Ebihara, A.; Chen, L.; Liu, Z. J.; Wang, B. C.; Yokoyama, S.; Kuramitsu, S.; Masui, R., Structure of dNTP-inducible dNTP triphosphohydrolase: insight into broad specificity for dNTPs and triphosphohydrolase-type hydrolysis. *Acta Crystallogr D Biol Crystallogr* **2007**, *63*, (Pt 2), 230-9.
26. Kelley, L. L.; Dillard, B. D.; Tempel, W.; Chen, L.; Shaw, N.; Lee, D.; Newton, M. G.; Sugar, F. J.; Jenney, F. E., Jr.; Lee, H. S.; Shah, C.; Poole, F. L., 3rd; Adams, M. W.; Richardson, J. S.; Richardson, D. C.; Liu, Z. J.; Wang, B. C.; Rose, J., Structure of the hypothetical protein PF0899 from *Pyrococcus furiosus* at 1.85 Å resolution. *Acta Crystallogr Sect F Struct Biol Cryst Commun* **2007**, *63*, (Pt 7), 549-52.
27. Kanaujia, S. P.; Ranjani, C. V.; Jeyakanthan, J.; Baba, S.; Chen, L.; Liu, Z. J.; Wang, B. C.; Nishida, M.; Ebihara, A.; Shinkai, A.; Kuramitsu, S.; Shiro, Y.; Sekar, K.; Yokoyama, S., Crystallization and preliminary crystallographic analysis of molybdenum-cofactor biosynthesis protein C from *Thermus thermophilus*. *Acta Crystallogr Sect F Struct Biol Cryst Commun* **2007**, *63*, (Pt 1), 27-9.
28. Gerwe, B.; Clancy Kelley, L. L.; Dillard, B. D.; Lai, T.; Liu, Z. J.; Tempel, W.; Chen, L.; Habel, J.; Lee, D.; Jenney, F. E. J.; Sugar, F. J.; Richardson, J. S.; Richardson, D. C.; Newton, M. G.; Wang, B. C.; Adams, M. W. W.; Rose, J. P., Structural and Transcriptional Analyses of a Purine Nucleotide-Binding Protein from *Pyrococcus furiosus*: a Component of a Novel, Membrane-Bound Multiprotein Complex Unique to this Hyperthermophilic Archaeon. *J Struct Funct Genomics* **2007**, *8*, 1, 1-10.
29. Fu, Z. Q.; Chrzas, J.; Sheldrick, G. M.; Rose, J. P.; Wang, B. C., A Parallel Program Using SHELXD for Quick Heavy-Atom Partial Structural Solution on High-Performance Computers. *J Appl Cryst* **2007**, *40*, 387-390.
30. Das, A.; Fu, Z. Q.; Tempel, W.; Liu, Z. J.; Chang, J.; Chen, L.; Lee, D.; Zhou, W.; Xu, H.; Shaw, N.; Rose, J. P.; Ljungdahl, L. G.; Wang, B. C., Characterization of a corrinoid protein involved in the C1 metabolism of strict anaerobic bacterium *Moorella thermoacetica*. *Proteins* **2007**, *67*, (1), 167-76.

31. Cacciapuoti, G.; Porcelli, M.; Moretti, M. A.; Sorrentino, F.; Concilio, L.; Zappia, V.; Liu, Z. J.; Tempel, W.; Schubot, F.; Rose, J. P.; Wang, B. C.; Brereton, P. S.; Jenney, F. E.; Adams, M. W., The first agmatine/cadaverine aminopropyl transferase: biochemical and structural characterization of an enzyme involved in polyamine biosynthesis in the hyperthermophilic archaeon *Pyrococcus furiosus*. *J Bacteriol* **2007**, 189, (16), 6057-67.
32. Wang, Y.; Li, W.; Zhang, T.; Ding, C.; Lu, Z.; Long, N.; Rose, J. P.; Wang, B. C.; Lin, D., Reconstruction of ancient genome and gene order from complete microbial genome sequences. *J Theor Biol* **2006**, 239, (4), 494-8.
33. Ruble, J. R.; Wang, B. C.; Rose, J. P., A simple method for motorized alignment of Osmic confocal optics. *J. Appl. Cryst.* **2006**, 39, 892-894.
34. Rose, J. P.; Liu, Z. J.; Chen, L.; Lee, D.; Tempel, W.; Newton, M. G.; Wang, B. C., High throughput de novo structure determination on a home source using quick soaks, ACTOR and parameter space screening. *Rigaku J.* **2006**, 23, 3-12.
35. Liu, Z. J.; Stepanyuk, G. A.; Vysotski, E. S.; Lee, J.; Markova, S. V.; Malikova, N. P.; Wang, B. C., Crystal structure of obelin after Ca²⁺-triggered bioluminescence suggests neutral coelenteramide as the primary excited state. *Proc Natl Acad Sci U S A* **2006**, 103, (8), 2570-5.
36. Kuratani, M.; Sakai, H.; Takahashi, M.; Yanagisawa, T.; Kobayashi, T.; Murayama, K.; Chen, L.; Liu, Z. J.; Wang, B. C.; Kuroishi, C.; Kuramitsu, S.; Terada, T.; Bessho, Y.; Shirouzu, M.; Sekine, S.; Yokoyama, S., Crystal structures of tyrosyl-tRNA synthetases from Archaea. *J Mol Biol* **2006**, 355, (3), 395-408.
37. Hiyama, T. B.; Zhao, M.; Kitago, Y.; Yao, M.; Sekine, S.; Terada, T.; Kuroishi, C.; Liu, Z. J.; Rose, J. P.; Kuramitsu, S.; Shirouzu, M.; Watanabe, N.; Yokoyama, S.; Tanaka, I.; Wang, B. C., Structural basis of CoA recognition by the *Pyrococcus* single-domain CoA-binding proteins. *J Struct Funct Genomics* **2006**, 7, (3-4), 119-29.
38. Zhou, W.; Das, A.; Habel, J. E.; Liu, Z. J.; Chang, J.; Chen, L.; Lee, D.; Nguyen, D.; Chang, S. H.; Tempel, W.; Rose, J. P.; Ljungdahl, L. G.; Wang, B. C., Isolation, crystallization and preliminary X-ray analysis of a methanol-induced corrinoid protein from *Moorella thermoacetica*. *Acta Crystallogr Sect F Struct Biol Cryst Commun* **2005**, 61, (Pt 5), 537-40.
39. Xu, H.; Yang, C.; Chen, L.; Kataeva, I. A.; Tempel, W.; Lee, D.; Habel, J. E.; Nguyen, D.; Pflugrath, J. W.; Ferrara, J. D.; Arendall, W. B., 3rd; Richardson, J. S.; Richardson, D. C.; Liu, Z. J.; Newton, M. G.; Rose, J. P.; Wang, B. C., Away from the edge II: in-house Se-SAS phasing with chromium radiation. *Acta Crystallogr D Biol Crystallogr* **2005**, 61, (Pt 7), 960-6.
40. Wang, B. C.; Adams, M. W.; Dailey, H.; DeLucas, L.; Luo, M.; Rose, J.; Bunzel, R.; Dailey, T.; Habel, J.; Horanyi, P.; Jenney, F. E., Jr.; Kataeva, I.; Lee, H. S.; Li, S.; Li, T.; Lin, D.; Liu, Z. J.; Luan, C. H.; Mayer, M.; Nagy, L.; Newton, M. G.; Ng, J.; Poole, F. L., 2nd; Shah, A.; Shah, C.; Sugar, F. J.; Xu, H., Protein production and crystallization at SECSG -- an overview. *J Struct Funct Genomics* **2005**, 6, (2-3), 233-43.
41. Wan, C.; Tempel, W.; Liu, Z. J.; Wang, B. C.; Rose, R. B., Structure of the conserved transcriptional repressor enhancer of rudimentary homolog. *Biochemistry* **2005**, 44, (13), 5017-23.
42. Tempel, W.; Liu, Z. J.; Horanyi, P. S.; Deng, L.; Lee, D.; Newton, M. G.; Rose, J. P.; Ashida, H.; Li, S. C.; Li, Y. T.; Wang, B. C., Three-dimensional structure of GlcNAc α 1-4Gal releasing endo-beta-galactosidase from *Clostridium perfringens*. *Proteins* **2005**, 59, (1), 141-4.
43. Shah, A. K.; Liu, Z. J.; Stewart, P. D.; Schubot, F. D.; Rose, J. P.; Newton, M. G.; Wang, B. C., On increasing protein-crystallization throughput for X-ray diffraction studies. *Acta Crystallogr D Biol Crystallogr* **2005**, 61, (Pt 2), 123-9.
44. Pusey, M. L.; Liu, Z. J.; Tempel, W.; Praissman, J.; Lin, D.; Wang, B. C.; Gavira, J. A.; Ng, J. D., Life in the fast lane for protein crystallization and X-ray crystallography. *Prog Biophys Mol Biol* **2005**, 88, (3), 359-86.
45. Newton, M. G.; Campana, C. F.; Chi, G.; Lee, D.; Liu, Z. J.; Nair, V.; Phillips, J.; Rose, J. P.; Wang, B. C., A Non-natural dinucleotide containing an isomeric L-related deoxynucleoside: dinucleotide inhibitors of anti -HIV integrase activity. *Acta Cryst C* **2005**, 61, 518-520.
46. Liu, Z. J.; Tempel, W.; Ng, J. D.; Lin, D.; Shah, A. K.; Chen, L.; Horanyi, P. S.; Habel, J. E.; Kataeva, I. A.; Xu, H.; Yang, H.; Chang, J. C.; Huang, L.; Chang, S. H.; Zhou, W.; Lee, D.; Praissman, J. L.; Zhang, H.; Newton, M. G.; Rose, J. P.; Richardson, J. S.; Richardson, D. C.; Wang, B. C., The high-throughput protein-to-structure pipeline at SECSG. *Acta Crystallogr D Biol Crystallogr* **2005**, 61, (Pt 6), 679-84.

47. Liu, Z. J.; Shah, A. K.; Habel, J. E.; Ng, J. D.; Kataeva, I.; Xu, H.; Horanyi, P.; Yang, H.; Chang, J.; Zhao, M.; Huang, L.; Chang, S.; Tempel, W.; Chen, L.; Zhou, W.; Lee, D.; Lin, D.; Zhang, H.; Newton, M. G.; Rose, J.; Wang, B. C., Salvaging *Pyrococcus furiosus* protein targets at SECSG. *J Struct Funct Genomics* **2005**, 6, (2-3), 121-7.
48. Liu, Z. J.; Lin, D.; Tempel, W.; Praissman, J. L.; Rose, J. P.; Wang, B. C., Parameter-space screening: a powerful tool for high-throughput crystal structure determination. *Acta Crystallogr D Biol Crystallogr* **2005**, 61, (Pt 5), 520-7.
49. Kataeva, I.; Chang, J.; Xu, H.; Luan, C. H.; Zhou, J.; Uversky, V. N.; Lin, D.; Horanyi, P.; Liu, Z. J.; Ljungdahl, L. G.; Rose, J.; Luo, M.; Wang, B. C., Improving solubility of *Shewanella oneidensis* MR-1 and *Clostridium thermocellum* JW-20 proteins expressed into *Escherichia coli*. *J Proteome Res* **2005**, 4, (6), 1942-51.
50. Karaveg, K.; Siriwardena, A.; Tempel, W.; Liu, Z. J.; Glushka, J.; Wang, B. C.; Moremen, K. W., Mechanism of class 1 (glycosylhydrolase family 47) α -mannosidases involved in N-glycan processing and endoplasmic reticulum quality control. *J Biol Chem* **2005**, 280, (16), 16197-207.
51. Fu, Z. Q.; Rose, J.; Wang, B. C., SGXPro: a parallel workflow engine enabling optimization of program performance and automation of structure determination. *Acta Crystallogr D Biol Crystallogr* **2005**, 61, (Pt 7), 951-9.
52. Deng, L.; Vysotski, E. S.; Markova, S. V.; Liu, Z. J.; Lee, J.; Rose, J.; Wang, B. C., All three Ca²⁺-binding loops of photoproteins bind calcium ions: the crystal structures of calcium-loaded apo-aequorin and apo-obelin. *Protein Sci* **2005**, 14, (3), 663-75.
53. Arendall, W. B., 3rd; Tempel, W.; Richardson, J. S.; Zhou, W.; Wang, S.; Davis, I. W.; Liu, Z. J.; Rose, J. P.; Carson, W. M.; Luo, M.; Richardson, D. C.; Wang, B. C., A test of enhancing model accuracy in high-throughput crystallography. *J Struct Funct Genomics* **2005**, 6, (1), 1-11.
54. Tempel, W.; Liu, Z. J.; Schubot, F. D.; Shah, A.; Weinberg, M. V.; Jenney, F. E., Jr.; Arendall, W. B., 3rd; Adams, M. W.; Richardson, J. S.; Richardson, D. C.; Rose, J. P.; Wang, B. C., Structural genomics of *Pyrococcus furiosus*: X-ray crystallography reveals 3D domain swapping in rubrerythrin. *Proteins* **2004**, 57, (4), 878-82.
55. Tempel, W.; Karaveg, K.; Liu, Z. J.; Rose, J.; Wang, B. C.; Moremen, K. W., Structure of mouse Golgi α -mannosidase IA reveals the molecular basis for substrate specificity among class 1 (family 47 glycosylhydrolase) α 1,2-mannosidases. *J Biol Chem* **2004**, 279, (28), 29774-86.
56. Schubot, F. D.; Kataeva, I. A.; Chang, J.; Shah, A. K.; Ljungdahl, L. G.; Rose, J. P.; Wang, B. C., Structural basis for the exocellulase activity of the cellobiohydrolase CbhA from *Clostridium thermocellum*. *Biochemistry* **2004**, 43, (5), 1163-70.
57. Rose, J. P.; Liu, Z. J.; Tempel, W.; Chen, L. R.; Lee, D.; Newton, M. G.; Wang, B. C., Practical aspects of SAS phasing using chromium X-rays. *Rigaku J.* **2004**, 21, 1-9.
58. Kataeva, I. A.; Uversky, V. N.; Brewer, J. M.; Schubot, F.; Rose, J. P.; Wang, B. C.; Ljungdahl, L. G., Interactions between immunoglobulin-like and catalytic modules in *Clostridium thermocellum* cellulosomal cellobiohydrolase CbhA. *Protein Eng Des Sel* **2004**, 17, (11), 759-69.
59. Jin, S.; Kurtz, D. M., Jr.; Liu, Z. J.; Rose, J.; Wang, B. C., X-ray crystal structure of *Desulfovibrio vulgaris* rubrerythrin with zinc substituted into the [Fe(SCys)₄] site and alternative diiron site structures. *Biochemistry* **2004**, 43, (11), 3204-13.
60. Jin, S.; Kurtz, D. M., Jr.; Liu, Z. J.; Rose, J.; Wang, B. C., Displacement of iron by zinc at the diiron site of *Desulfovibrio vulgaris* rubrerythrin: X-ray crystal structure and anomalous scattering analysis. *J Inorg Biochem* **2004**, 98, (5), 786-96.
61. Fu, Z. Q.; Rose, J. P.; Wang, B. C., Monitoring the anomalous scattering signal and noise levels in X-ray diffraction of crystals. *Acta Crystallogr D Biol Crystallogr* **2004**, 60, (Pt 3), 499-506.
62. Deng, L.; Starostina, N. G.; Liu, Z. J.; Rose, J. P.; Terns, R. M.; Terns, M. P.; Wang, B. C., Structure determination of fibrillarlin from the hyperthermophilic archaeon *Pyrococcus furiosus*. *Biochem Biophys Res Commun* **2004**, 315, (3), 726-32.
63. Deng, L.; Markova, S. V.; Vysotski, E. S.; Liu, Z. J.; Lee, J.; Rose, J.; Wang, B. C., Preparation and X-ray crystallographic analysis of the Ca²⁺-discharged photoprotein obelin. *Acta Crystallogr D Biol Crystallogr* **2004**, 60, (Pt 3), 512-4.

64. Deng, L.; Markova, S. V.; Vysotski, E. S.; Liu, Z. J.; Lee, J.; Rose, J.; Wang, B. C., Crystal structure of a Ca²⁺-discharged photoprotein: implications for mechanisms of the calcium trigger and bioluminescence. *J Biol Chem* **2004**, *279*, (32), 33647-52.
65. Deng, L.; Liu, Z. J.; Ashida, H.; Li, S. C.; Li, Y. T.; Horanyi, P.; Tempel, W.; Rose, J.; Wang, B. C., Crystallization and preliminary X-ray analysis of GlcNAc alpha 1,4Gal-releasing endo-beta-galactosidase from *Clostridium perfringens*. *Acta Crystallogr D Biol Crystallogr* **2004**, *60*, (Pt 3), 537-8.
66. Chen, L.; Chen, L. R.; Zhou, X. E.; Wang, Y.; Kahsai, M. A.; Clark, A. T.; Edmondson, S. P.; Liu, Z. J.; Rose, J. P.; Wang, B. C.; Meehan, E. J.; Shriver, J. W., The hyperthermophile protein Sso10a is a dimer of winged helix DNA-binding domains linked by an antiparallel coiled coil rod. *J Mol Biol* **2004**, *341*, (1), 73-91.
67. Wu, C. K.; Dailey, T. A.; Dailey, H. A.; Wang, B. C.; Rose, J. P., The crystal structure of augments of liver regeneration: A mammalian FAD-dependent sulfhydryl oxidase. *Protein Sci* **2003**, *12*, (5), 1109-18.
68. Vysotski, E. S.; Liu, Z. J.; Markova, S. V.; Blinks, J. R.; Deng, L.; Frank, L. A.; Herko, M.; Malikova, N. P.; Rose, J. P.; Wang, B. C.; Lee, J., Violet bioluminescence and fast kinetics from W92F obelin: structure-based proposals for the bioluminescence triggering and the identification of the emitting species. *Biochemistry* **2003**, *42*, (20), 6013-24.
69. Liu, Z. J.; Vysotski, E. S.; Deng, L.; Lee, J.; Rose, J.; Wang, B. C., Atomic resolution structure of obelin: soaking with calcium enhances electron density of the second oxygen atom substituted at the C2-position of coelenterazine. *Biochem Biophys Res Commun* **2003**, *311*, (2), 433-9.
70. Karaveg, K.; Liu, Z. J.; Tempel, W.; Doyle, R. J.; Rose, J. P.; Wang, B. C., Crystallization and preliminary X-ray diffraction analysis of lectin-1 from *Pseudomonas aeruginosa*. *Acta Crystallogr D Biol Crystallogr* **2003**, *59*, (Pt 7), 1241-2.
71. Chen, C. J.; Liu, M. Y.; Chang, T.; Chang, W. C.; Wang, B. C.; Le Gall, J., Crystal structure of a nucleoside diphosphate kinase from *Bacillus halodenitrificans*: coexpression of its activity with a Mn-superoxide dismutase. *J Struct Biol* **2003**, *142*, (2), 247-55.
72. Adams, M. W.; Dailey, H. A.; DeLucas, L. J.; Luo, M.; Prestegard, J. H.; Rose, J. P.; Wang, B. C., The Southeast Collaboratory for Structural Genomics: a high-throughput gene to structure factory. *Acc Chem Res* **2003**, *36*, (3), 191-8.
73. Srinivasan, V.; Ma, K.; Adams, M. W.; Newton, M. G.; Rose, J. P.; Wang, B. C., Towards the crystal structure of glycerol dehydrogenase from *Thermotoga maritima*. *Acta Crystallogr D Biol Crystallogr* **2002**, *58*, (Pt 5), 867-9.
74. Markova, S. V.; Vysotski, E. S.; Blinks, J. R.; Burakova, L. P.; Wang, B. C.; Lee, J., Obelin from the bioluminescent marine hydroid *Obelia geniculata*: cloning, expression, and comparison of some properties with those of other Ca²⁺-regulated photoproteins. *Biochemistry* **2002**, *41*, (7), 2227-36.
75. Li, S.; Finley, J.; Liu, Z. J.; Qiu, S. H.; Chen, H.; Luan, C. H.; Carson, M.; Tsao, J.; Johnson, D.; Lin, G.; Zhao, J.; Thomas, W.; Nagy, L. A.; Sha, B.; DeLucas, L. J.; Wang, B. C.; Luo, M., Crystal structure of the cytoskeleton-associated protein glycine-rich (CAP-Gly) domain. *J Biol Chem* **2002**, *277*, (50), 48596-601.
76. Jin, S.; Kurtz, D. M., Jr.; Liu, Z. J.; Rose, J.; Wang, B. C., X-ray crystal structures of reduced rubrerythrin and its azide adduct: a structure-based mechanism for a non-heme diiron peroxidase. *J Am Chem Soc* **2002**, *124*, (33), 9845-55.
77. Gavira-Gallardo, J. A.; Toh, D. S.; Liu, Z. J.; Wang, B. C.; D., N. J., Coupling Counter-Diffusion Capillary Crystallization and Iterative Single Anomalous Scattering for High-Throughput Crystal Screening and Structure Determination. *Biophysical Journal* **2002**, *82*, 2293.
78. Wu, C. K.; Hu, B.; Rose, J. P.; Liu, Z. J.; Nguyen, T. L.; Zheng, C.; Breslow, E.; Wang, B. C., Structures of an unliganded neurophysin and its vasopressin complex: implications for binding and allosteric mechanisms. *Protein Sci* **2001**, *10*, (9), 1869-80.
79. Wu, C. K.; Dailey, H. A.; Rose, J. P.; Burden, A.; Sellers, V. M.; Wang, B. C., The 2.0 Å structure of human ferrochelatase, the terminal enzyme of heme biosynthesis. *Nat Struct Biol* **2001**, *8*, (2), 156-60.
80. Vysotski, E. S.; Z.-J. Liu, Z. J.; L. Deng, L.; Rose, J. P.; Wang, B. C.; L., L., Structure of the Calcium-Regulated Photoprotein Obelin Solved at 1.1Å: Implications for the Mechanism of Bioluminescence. *Proceedings of the 11th international symposium on bioluminescence and chemiluminescence* **2001**.

81. Vysotski, E. S.; Liu, Z. J.; Rose, J.; Wang, B. C.; Lee, J., Preparation and X-ray crystallographic analysis of recombinant obelin crystals diffracting to beyond 1.1 Å. *Acta Crystallogr D Biol Crystallogr* **2001**, 57, (Pt 12), 1919-21.
82. Schubot, F. D.; Kataeva, I. A.; Blum, D. L.; Shah, A. K.; Ljungdahl, L. G.; Rose, J. P.; Wang, B. C., Structural basis for the substrate specificity of the feruloyl esterase domain of the cellulosomal xylanase Z from *Clostridium thermocellum*. *Biochemistry* **2001**, 40, (42), 12524-32.
83. Schubot, F. D.; Chen, C. J.; Rose, J. P.; Dailey, T. A.; Dailey, H. A.; Wang, B. C., Crystal structure of the transcription factor sc-mtTFB offers insights into mitochondrial transcription. *Protein Sci* **2001**, 10, (10), 1980-8.
84. Liu, Z. J.; Vysotski, E. S.; Rose, J. P.; Lee, J.; Wang, B. C., Crystal Structure of the Calcium-Regulated Photoprotein Obelin solved at 1.1Å. *Proceedings of the 11th international symposium on bioluminescence and chemiluminescence* **2001**, 124-133.
85. Hempel, J.; Lindahl, R.; Perozich, J.; Wang, B. C.; I, K.; Nicholas, H., Beyond the Catalytic Core of ALDH a Web of Important Residues Begins To Emerge. *Chemico-Biological Interactions* **2001**, 130, 39-46.
86. Hempel, J.; Kuo, I.; Perozich, J.; Wang, B. C.; Lindahl, R.; Nicholas, H., Aldehyde dehydrogenase. Maintaining critical active site geometry at motif 8 in the class 3 enzyme. *Eur J Biochem* **2001**, 268, (3), 722-6.
87. Farmer, C. S.; Kurtz, D. M., Jr.; Liu, Z. J.; Wang, B. C.; Rose, J.; Ai, J.; Sanders-Loehr, J., The crystal structures of *Phascolopsis gouldii* wild type and L98Y methemerythrins: structural and functional alterations of the O₂ binding pocket. *J Biol Inorg Chem* **2001**, 6, (4), 418-29.
88. Deng, L.; Vysotski, E. S.; Liu, Z. J.; Markova, S. V.; Malikova, N. P.; Lee, J.; Rose, J.; Wang, B. C., Structural basis for the emission of violet bioluminescence from a W92F obelin mutant. *FEBS Lett* **2001**, 506, (3), 281-5.
89. Wu, C. K.; Dailey, T.; Dailey, H.; Francavilla, A.; Starzl, T. E.; Wang, B. C.; Rose, J. P., Expression, Purification, Crystallization and Preliminary X-ray Analysis of the Augmenter of Liver Regeneration. *J. Prot. Pep. Lett.* **2000**, 7, 25-32.
90. Sigler, P. B.; Stein, G. S.; Boskey, A. L.; Jones, N. D.; Kuriyan, J.; Miller, W. M.; Shuler, M. L.; Wang, B. C., Cell science and protein crystal growth research for the International Space Station. *J Cell Biochem* **2000**, 79, (4), 662-71.
91. Schubot, F. D.; Chen, C. J.; Rose, J. P.; Wang, B. C., Crystallization and preliminary X-ray diffraction analysis of the mitochondrial transcription factor sc-mtTFB from *Saccharomyces cerevisiae*. *Acta Crystallogr D Biol Crystallogr* **2000**, 56, (Pt 7), 902-3.
92. Perozich, J.; Kuo, I.; Wang, B. C.; Boesch, J. S.; Lindahl, R.; Hempel, J., Shifting the NAD/NADP preference in class 3 aldehyde dehydrogenase. *Eur J Biochem* **2000**, 267, (20), 6197-203.
93. Liu, Z. J.; Vysotski, E. S.; Chen, C. J.; Rose, J. P.; Lee, J.; Wang, B. C., Structure of the Ca²⁺-regulated photoprotein obelin at 1.7 Å resolution determined directly from its sulfur substructure. *Protein Sci* **2000**, 9, (11), 2085-93.
94. Dailey, H. A.; Dailey, T. A.; Wu, C. K.; Medlock, A. E.; Wang, K. F.; Rose, J. P.; Wang, B. C., Ferrochelatase at the millennium: structures, mechanisms and [2Fe-2S] clusters. *Cell Mol Life Sci* **2000**, 57, (13-14), 1909-26.
95. Blum, D. L.; Schubot, F. D.; Ljungdahl, L. G.; Rose, J. P.; Wang, B. C., Crystallization and preliminary X-ray analysis of the *Clostridium thermocellum* cellulosome xylanase Z feruloyl esterase domain. *Acta Crystallogr D Biol Crystallogr* **2000**, 56, (Pt 8), 1027-9.
96. Wang, K. F.; Wu, C. K.; Sellers, V. M.; Rose, J. P.; Wang, B. C.; Dailey, H. A., Purification, crystallization and preliminary X-ray analysis of *Drosophila melanogaster* ferrochelatase. *Acta Crystallogr D Biol Crystallogr* **1999**, 55, (Pt 6), 1201-3.
97. Vysotski, E. S.; Liu, Z. J.; Rose, J.; Wang, B. C.; Lee, J., Preparation and preliminary study of crystals of the recombinant calcium-regulated photoprotein obelin from the bioluminescent hydroid *Obelia longissima*. *Acta Crystallogr D Biol Crystallogr* **1999**, 55, (Pt 11), 1965-6.
98. Rose, J. P.; Liebson, M.; Wang, B. C.; Abola, E. E., GETENTRY: A Simple Unix Script for accessing the Protein Data Banks anonymous FTP server. *J. Appl Cryst* **1999**, 32, 1190-1190.
99. Perozich, J.; Nicholas, H.; Wang, B. C.; Lindahl, R.; Hempel, J., Relationships within the aldehyde dehydrogenase extended family. *Protein Sci* **1999**, 8, (1), 137-46.

100. Hu, B.; Rose, J. P.; Newton, M. G.; Breslow, E.; Wang, B. C., 92.1. Improved Crystals of a Bovine Neurophysin II - Vasopressin Complex. *Prot Pep Letts.* **1999**, 6, 111-114.
101. Hempel, J.; Perozich, J.; Chapman, T.; Rose, J.; Boesch, J. S.; Liu, Z. J.; Lindahl, R.; Wang, B. C., Aldehyde dehydrogenase catalytic mechanism. A proposal. *Adv Exp Med Biol* **1999**, 463, 53-9.
102. Chen, C. J.; Liu, Z. J.; Rose, J. P.; Wang, B. C., Low-salt crystallization of T7 RNA polymerase: a first step towards the transcription bubble complex. *Acta Crystallogr D Biol Crystallogr* **1999**, 55, (Pt 6), 1188-92.
103. Carter, D. C.; Wright, B.; Miller, T.; Chapman, J.; Twigg, P.; Keeling, K.; Moody, K.; White, M.; Click, J.; Ruble, J. R.; Ho, J. X.; Adock-Downey, L.; Dowling, T.; Chang, C. H.; Ala, A.; Rose, J. P.; Wang, B. C.; Declereq, J. P.; Evrard, C.; Rosenberg, J. M.; Wery, J. P.; Clawson, D.; Wardell, M.; W., S.; Stevens, A., PCAM: a multi-user facility-based protein crystallization apparatus for microgravity, D.C. Carter, B. Wright, T. Miller, J. Chapman, P. Twigg, K. Keeling, K. Moody, M. White, J. Click, J. R. Ruble, J. X. Ho, L. Adock-Downey, T. Dowling, C.-H. Chang, A. Ala, J. Rose, B.C. Wang, J.-P. Declereq, C. Evrard, J. Rosenberg, J.-P. Wery, D. Clawson, M. Wardell, W. Stallings and A. Stevens, *J. Crystal Growth*, 196, 610-622, (1999). *J. Crystal Growth* **1999**, 196, 610-622.
104. Burden, A. E.; Wu, C. K.; Dailey, T. A.; Busch, J. L. H.; Dhawan, I. K.; Rose, J. P.; Wang, B. C., Human Ferrochelatase: Crystallization, Characterization of the [2Fe-2S] Cluster and Determination that the Enzyme is a Homodimer. A. E. Burden, C.-K. Wu, T.A. Dailey, J. L. H. Busch, I.K. Dhawan, J.P. Rose, B.C. Wang and H.A. Dailey, *Biochem. et Biophys. Acta* 1435, 191-197 (1999). *Biochem. et Biophys. Acta* **1999**, 1435, 191-197.
105. Breslow, E.; Mombouyran, V.; Deeb, R.; Zheng, C.; Rose, J. P.; Wang, B. C.; Haschemeyer, R. H., Structural basis of neurophysin hormone specificity: Geometry, polarity, and polarizability in aromatic ring interactions. *Protein Sci* **1999**, 8, (4), 820-31.
106. Velikson, B.; Cohen, P.; Rholam, M.; Rose, J. P.; Wang, B. C.; Smith, J. C., Structural modeling of the procytocin-neurophysin precursor. *Protein Eng* **1998**, 11, (10), 909-16.
107. Sun, Y. J.; Rose, J.; Wang, B. C.; Hsiao, C. D., The structure of glutamine-binding protein complexed with glutamine at 1.94 Å resolution: comparisons with other amino acid binding proteins. *J Mol Biol* **1998**, 278, (1), 219-29.
108. Wu, C. K.; Liu, Z. J.; Rose, J. P.; Inouye, S.; Tsuji, F.; Tsien, R. Y.; Remington, S. J.; Wang, B. C., The Three-Dimensional Structure of Green Fluorescent Protein Resembles a Lantern. *Bioluminescence and Chemiluminescence: Molecular Reporting with Photons*, Edited by J. W. Hastings, L. J. Kricka and P. E. Stanley, John Wiley & Sons **1997**, 388-402.
109. Rose, J. P.; Wu, C. K.; Francavilla, A.; Prelich, J. G.; Iacobellis, A.; Hagiya, M.; Rao, A. S.; Starzl, T. E.; Wang, B. C., Crystallization and preliminary crystallographic data for the augments of liver regeneration. *Acta Crystallogr D Biol Crystallogr* **1997**, 53, (Pt 3), 331-4.
110. Rose, J. P.; Wang, B. C., X-stream - Cryocrystallography. *The Rigaku Journal* **1997**, 14, 4-11.
111. Liu, Z. J.; Sun, Y. J.; Rose, J.; Chung, Y. J.; Hsiao, C. D.; Chang, W. R.; Kuo, I.; Perozich, J.; Lindahl, R.; Hempel, J.; Wang, B. C., The first structure of an aldehyde dehydrogenase reveals novel interactions between NAD and the Rossmann fold. *Nat Struct Biol* **1997**, 4, (4), 317-26.
112. Liu, Z. J.; Hempel, J.; Sun, J.; Rose, J.; Hsiao, D.; Chang, W. R.; Chung, Y. J.; Kuo, I.; Lindahl, R.; Wang, B. C., Crystal structure of a class 3 aldehyde dehydrogenase at 2.6 Å resolution. *Adv Exp Med Biol* **1997**, 414, 1-7.
113. Hempel, J.; Liu, Z. J.; Perozich, J.; Rose, J.; Lindahl, R.; Wang, B. C., Conserved residues in the aldehyde dehydrogenase family. Locations in the class 3 tertiary structure. *Adv Exp Med Biol* **1997**, 414, 9-13.
114. Wu, C. K.; Rose, J. P.; Zheng, C.; Breslow, E.; Wang, B. C., Crystals of ligand-free bovine neurophysin II. *Acta Crystallogr D Biol Crystallogr* **1996**, 52, (Pt 5), 946-9.
115. Rose, J. P.; Wu, C. K.; Hsiao, C. D.; Breslow, E.; Wang, B. C., Crystal structure of the neurophysin-oxytocin complex. *Nat Struct Biol* **1996**, 3, (2), 163-9.
116. Hu, B.; Rose, J. P.; Breslow, E.; Wang, B. C., Preliminary Crystallographic Analysis of Bovine Neurophysin II Complexed with the Hormones Vasopressin and Hydrin I. *Peptide Letters* **1996**, 3, 351-354.
117. Hsiao, C. D.; Sun, Y. J.; Rose, J.; Wang, B. C., The crystal structure of glutamine-binding protein from *Escherichia coli*. *J Mol Biol* **1996**, 262, (2), 225-42.
118. Sun, J.; Hempel, J.; Lindahl, R.; Perozich, J.; Rose, J.; Wang, B. C., Progress toward the tertiary structure of (class 3) aldehyde dehydrogenase. *Adv Exp Med Biol* **1995**, 372, 71-7.

119. Sousa, R.; Bonner, G.; Chung, Y. J.; Rose, J. P.; Patra, D.; Wang, B. C.; M., L. E., Structure and Mechanism of T7 RNA-Polymerase. R. Sousa, G. Bonner, Y.J. Chung, J. Rose, D. Patra, B.C. Wang, E.M. Lafer. *FASEB Journal* 9, A1391-A1391 (1995). *FASEB Journal* **1995**, 0, A1391-A1391.
120. Zeng, K.; Rose, J. P.; Chen, H. C.; Strickland, C. L.; Tu, C. P.; Wang, B. C., A surface mutant (G82R) of a human alpha-glutathione S-transferase shows decreased thermal stability and a new mode of molecular association in the crystal. *Proteins* **1994**, 20, (3), 259-63.
121. Wang, B. C.; Rose, J.; Arents, G.; Moudrianakis, E. N., The octameric histone core of the nucleosome. Structural issues resolved. *J Mol Biol* **1994**, 236, (1), 179-88.
122. Sousa, R.; Rose, J.; Wang, B. C., The thumb's knuckle. Flexibility in the thumb subdomain of T7 RNA polymerase is revealed by the structure of a chimeric T7/T3 RNA polymerase. *J Mol Biol* **1994**, 244, (1), 6-12.
123. Hsiao, C. D.; Sun, Y. J.; Rose, J.; Cottam, P. F.; Ho, C.; Wang, B. C., Crystals of glutamine-binding protein in various conformational states. *J Mol Biol* **1994**, 240, (1), 87-91.
124. Fu, J. H.; Rose, J.; Tam, M. F.; Wang, B. C., New crystal forms of a micro-class glutathione S-transferase from rat liver. *Acta Crystallogr D Biol Crystallogr* **1994**, 50, (Pt 2), 219-24.
125. Ago, H.; Habuka, N.; Kataoka, J.; Furuno, M.; Tsuge, H.; Noma, M.; Miyano, M.; Wang, B. C.; Xuong, N. H., Improved crystals of the toxic protein MAP by protein engineering towards the host specificity. *Acta Crystallogr D Biol Crystallogr* **1994**, 50, (Pt 4), 404-7.
126. Wang, B. C.; Rose, J. P., Structural Studies of the Neurophysin-Hormone System. *Proc. 2nd ROC-Japan Seminar on Crystallography. Taipei, Taiwan, ROC* **1993**, 139-150.
127. Sousa, R.; Chung, Y. J.; Rose, J. P.; Wang, B. C., Crystal structure of bacteriophage T7 RNA polymerase at 3.3 A resolution. *Nature* **1993**, 364, (6438), 593-9.
128. Sousa, R.; Chung, Y. J.; Wang, B. C.; Lafer, E., Single Crystals of a Chimeric T7/T3 RNA Polymerase with T3 Promoter Specificity. *J. Crystal Growth* **1992**, 122, 366-374.
129. Chen, P.; Rose, J.; Love, R.; Wei, C. H.; Wang, B. C., Reactive sites of an anticarcinogenic Bowman-Birk proteinase inhibitor are similar to other trypsin inhibitors. *J Biol Chem* **1992**, 267, (3), 1990-4.
130. Rose, J. P.; Breslow, E.; Huang, H. B.; Wang, B. C., Crystallographic analysis of the neurophysin-oxytocin complex. A preliminary report. *J Mol Biol* **1991**, 221, (1), 43-5.
131. Robbins, A. H.; McRee, D. E.; Williamson, M.; Collett, S. A.; Xuong, N. H.; Furey, W. F.; Wang, B. C.; Stout, C. D., Refined crystal structure of Cd, Zn metallothionein at 2.0 A resolution. *J Mol Biol* **1991**, 221, (4), 1269-93.
132. Hempel, J.; Rose, J. P.; Kuo, I.; Lindahl, R.; Wang, B. C., Rat class 3 aldehyde dehydrogenase: crystals and preliminary analysis. *Adv Exp Med Biol* **1991**, 284, 9-11.
133. Fu, J. H.; Rose, J.; Chung, Y. J.; Tam, M. F.; Wang, B. C., Crystals of isoenzyme 3-3 of rat liver glutathione S-transferase with and without inhibitor. *Acta Crystallogr B* **1991**, 47 (Pt 5), 813-4.
134. Chen, L. Q.; Rose, J. P.; Breslow, E.; Yang, D.; Chang, W. R.; Furey, W. F., Jr.; Sax, M.; Wang, B. C., Crystal structure of a bovine neurophysin II dipeptide complex at 2.8 A determined from the single-wavelength anomalous scattering signal of an incorporated iodine atom. *Proc Natl Acad Sci U S A* **1991**, 88, (10), 4240-4.
135. Chen, C. J.; Rose, J.; Hsiao, C. D.; Lee, T. J.; Wu, W. G.; Wang, B. C., Preliminary crystallographic analysis of cardiotoxin V with major fusion activity from Taiwan cobra (*Naja naja atra*) venom. *J Mol Biol* **1991**, 219, (4), 591-2.
136. Benatan, E.; Rose, J.; Breslow, E.; Wang, B. C., Crystals of a bovine neurophysin II tripeptide complex. *J Mol Biol* **1991**, 222, (1), 23-5.
137. Arents, G.; Burlingame, R. W.; Wang, B. C.; Love, W. E.; Moudrianakis, E. N., The nucleosomal core histone octamer at 3.1 A resolution: a tripartite protein assembly and a left-handed superhelix. *Proc Natl Acad Sci U S A* **1991**, 88, (22), 10148-52.
138. Sousa, R.; Chung, Y. J.; McAllister, W. T.; Wang, B. C.; Lafer, E. M., Single crystals of a chimeric T7/T3 RNA polymerase with T3 promoter specificity and a nonprocessive T7 RNAP mutant. *J Biol Chem* **1990**, 265, (35), 21430-2.
139. Rose, J. P.; Wang, B. C., Factors Affecting the Data Reproducibility on an Area Detector. *J. Appl Cryst* **1990**, 23, 234-240.

140. Rose, J. P.; Hempel, J.; Kuo, I.; Lindahl, R.; Wang, B. C., Preliminary crystallographic analysis of class 3 rat liver aldehyde dehydrogenase. *Proteins* **1990**, 8, (4), 305-8.
141. Hempel, J.; Rose, J. P.; Kuo, I.; Lindahl, R.; Wang, B. C., Rat class 3 Aldehyde Dehydrogenase: Crystals and Preliminary Analysis. *Exp. Medicine and Biology* **1990**, 284, 9-11.
142. Sousa, R.; Rose, J. P.; Chung, Y. J.; Lafer, E. M.; Wang, B. C., Single crystals of bacteriophage T7 RNA polymerase. *Proteins* **1989**, 5, (4), 266-70.
143. Chung, Y. J.; Sousa, R.; Rose, J. P.; Lafer, E.; Wang, B. C., Three-Dimensional Structure of Bacteriophage T7 RNA Polymerase. *Gene Regulation and AIDS: Transcription Activation, Retroviruses, and Pathogenesis* **1989**, 3-7.
144. Chen, P.; Rose, J.; Chung, Y. J.; Wang, B. C.; Shen, Q. C.; Cottam, P. F.; Ho, C., Preliminary crystallographic analysis of glutamine-binding protein from Escherichia coli. *J Mol Biol* **1989**, 205, (2), 459-60.
145. Chang, W. R.; Chen, L. Q.; Rose, J.; Wei, C. H.; Abrams, L.; Sax, M.; Wang, B. C., A new crystal form of ricin-OR. *Eur J Biochem* **1989**, 180, (2), 327-8.
146. Rose, J. P.; Yang, D.; Yoo, C. S.; Sax, M.; Breslow, E.; Wang, B. C., Crystals of modified bovine neurophysin II. *Eur J Biochem* **1988**, 174, (1), 145-7.
147. Yang, D. S. C.; Pletcher, J.; Rose, J. P.; Yoo, C. S.; Furey, W.; Wang, B. C.; Sax, M., Structure of Thiamin Dinitrate. D. S. C. Yang, J. Pletcher, J. P. Rose, C. S. Yoo, W. Furey, B. C. Wang and M. Sax, *Acta Cryst. C43*, 313-316 (1987). *Acta Cryst C* **1987**, 43, 313-316.
148. Rosenberg, J. M.; Wang, B. C.; Frederick, C. A.; Reich, N.; Green, P.; Grable, J.; McClarin, J. A., Development of a Protein Design Strategy for EcoRI Endonuclease. *Protein Engineering* **1987**, 237-250.
149. Rosenberg, J. M.; McClarin, J. A.; Frederick, C. A.; Wang, B. C.; Grable, J.; Boyer, H. W.; Greene, P., Structure and Recognition Mechanism of EcoRI Endonuclease. J. M. Rosenberg, J. A. McClarin, C. A. Frederick, B. C. Wang, J. Grable, H. W. Boyer and P. Greene, *TIBS*, 142, 395-402 (1987). *TIBS* **1987**, 142, 395-402.
150. Rosenberg, J. M.; McClarin, J. A.; Frederick, C. A.; Wang, B. C.; Boyer, H. W.; Grable, J.; Greene, P., The Structure and Function of EcoRI Endonuclease. J. M. Rosenberg, J. A. McClarin, C. A. Frederick, B. C. Wang, H. W. Boyer, J. Grable and P. Greene, in "Biological Organization: Macromolecular Interactions at High Resolution." Academic Press, 1987, pp. 11-43. *Biological Organization: Macromolecular Interactions at High Resolution* **1987**, 11-43.
151. Furey, W. F.; Robbins, A. H.; Clancy, L. L.; Winge, D. R.; Wang, B. C.; Stout, C. D., Crystal structure of Cd,Zn metallothionein. *Experientia Suppl* **1987**, 52, 139-48.
152. Rosenberg, J. M.; McClarin, J. A.; Frederick, C. A.; Wang, B. C.; Greene, P.; Boyer, H. W., The 3Å Structure of A DNA-EcoRI Endonuclease Recognition Complex. J. M. Rosenberg, J. A. McClarin, C. A. Frederick, B. C. Wang, P. Greene, H. W. Boyer, and J. Grable. *Chemica Scripta* 26B 147-157 (1986). *Chemica Scripta* **1986**, 26B, 147-157.
153. McClarin, J. A.; Frederick, C. A.; Wang, B. C.; Greene, P.; Boyer, H. W.; Grable, J.; Rosenberg, J. M., Structure of the DNA-Eco RI endonuclease recognition complex at 3 Å resolution. *Science* **1986**, 234, (4783), 1526-41.
154. Furey, W. F.; Robbins, A. H.; Clancy, L. L.; Winge, D. R.; Wang, B. C.; Stout, C. D., Crystal structure of Cd,Zn metallothionein. *Science* **1986**, 231, (4739), 704-10.
155. Wang, B. C., Resolution of phase ambiguity in macromolecular crystallography. *Methods Enzymol* 1985, 115, 90-112.
156. Sundaralingam, M.; Bergstrom, R.; Strasburg, G. M.; Rao, S. T.; Roychowdhury, P.; Greaser, M. L.; Wang, B. C., Molecular-Structure of Troponin-C from Chicken Skeletal-Muscle at 3Å Resolution. M. Sundaralingam, R. Bergstrom, G. M. Strasburg, S. T. Rao, P. Roychowdhury, M. L. Greaser and B. C. Wang, *J. Biosciences* 8:451-460 (1985). *J. Biosciences* **1985**, 8, 451-460.
157. Sundaralingam, M.; Bergstrom, R.; Strasburg, G.; Rao, S. T.; Roychowdhury, P.; Greaser, M.; Wang, B. C., Molecular structure of troponin C from chicken skeletal muscle at 3-angstrom resolution. *Science* **1985**, 227, (4689), 945-8.
158. Moudrianakis, E. N.; Love, W. E.; Wang, B. C.; Xuong, N. G.; Burlingame, R. W., Crystallographic Structure of the Octamer Histone Core of the Nucleosome. *Science* **1985**, 229, (4718), 1110-1112.

159. Chang, C. H.; Short, M. T.; Westholm, F. A.; Stevens, F. J.; Wang, B. C.; Furey, W., Jr.; Solomon, A.; Schiffer, M., Novel arrangement of immunoglobulin variable domains: X-ray crystallographic analysis of the lambda-chain dimer Bence-Jones protein. *Biochemistry* **1985**, *24*, (18), 4890-7.
160. Carter, D. C.; Melis, K. A.; O'Donnell, S. E.; Burgess, B. K.; Furey, W. R., Jr.; Wang, B. C.; Stout, C. D., Crystal structure of Azotobacter cytochrome c5 at 2.5 Å resolution. *J Mol Biol* **1985**, *184*, (2), 279-95.
161. Burlingame, R. W.; Love, W. E.; Wang, B. C.; Hamlin, R.; Nguyen, H. X.; Moudrianakis, E. N., Crystallographic structure of the octameric histone core of the nucleosome at a resolution of 3.3 Å. *Science* **1985**, *228*, (4699), 546-53.
162. Kozikowski, A. P.; Hirage, K.; Springer, J. P.; Wang, B. C.; Xu, Z. B., [(4+2) + (3+2)] Route to Multiply Fused Ring Systems: a New Notion in Polycycle Construction. *J. Am. Chem. Soc.* **1984**, *106*, 1845-1847.
163. Kozikowski, A. P.; Chen, Y. Y.; Wang, B. C.; Xu, Z. B., The Intramolecular Nitrile Oxide Cycloaddition (INOC) Route to the Ergot Alkaloids: Use of Thisoxazoline to α -Amino Alcohol Conversion in the Total Synthesis of (+) Paliclavine. *Tetrahedron Letters* **1984**, *40*, 2345-2358.
164. Frederick, C. A.; Grable, J.; Melia, M.; Samudzi, C.; Jen-Jacobson, L.; Wang, B. C.; Greene, P.; Boyer, H. W.; Rosenberg, J. M., Kinked DNA in crystalline complex with EcoRI endonuclease. *Nature* **1984**, *309*, (5966), 327-31.
165. Kozikowski, A. P.; Sorgi, K. L.; Wang, B. C.; Xu, Z. B., An Improved Method for the Synthesis of Anomerically Allylated C Glycopyranosides and C Glycofuranosides. *Tetrahedron Letters* **1983**, *24*, 1563-1566.
166. Kozikowski, A. P.; Mugrage, B. B.; Wang, B. C.; Xu, Z. B., The INOC Approach to the Hydroazulenone Ring System - A Potential Entry to the Guainolides and Pseudoguainolides. *Tetrahedron Letters* **1983**, *24*, 3705-3708.
167. Furey, W., Jr.; Wang, B. C.; Yoo, C. S.; Sax, M., Structure of a novel Bence-Jones protein (Rhe) fragment at 1.6 Å resolution. *J Mol Biol* **1983**, *167*, (3), 661-92.
168. Robbins, A. H.; Stout, C. D.; Piskiewicz, D.; Gawron, O.; Yoo, C. S.; Wang, B. C.; Sax, M., Single crystals of the iron-sulfur enzyme aconitase. *J Biol Chem* **1982**, *257*, (15), 9061-3.
169. Furey, W. J.; Wang, B. C.; Sax, M., Crystallographic Computing on an Array Processor. *J. Appl Cryst* **1982**, *15*, 160-166.
170. Chang, C. H.; S., Y. D.; Yoo, C. S.; Pletcher, J.; Sax, M.; Terrence, C. F., Structure and Absolute Configuration of (R)-Baclofen Monohydrochloride. *Acta Cryst B* **1982**, *38*, 2065-2067.
171. Chung, Y. J.; Sousa, R.; Rose, J. P.; Lafer, E.; Wang, B. C., Crystallographic Structure of Phage T7 RNA Polymerase at a Resolution of 4.0 Å. *Structure and Function of Nucleic Acids and Proteins*, Edited by F. Y. H. Wu and C. W. Wu, Raven Press Ltd., New York **1980**, *8*.
172. Yoo, C. S.; Wang, B. C.; Sax, M.; Breslow, E., Crystals of a bovine neurophysin II-dipeptide amide complex. *J Mol Biol* **1979**, *127*, (2), 241-2.
173. Wang, B. C.; Yoo, C. S.; Sax, M., Crystal structure of Bence Jones protein rhe (3 Å) and its unique domain-domain association. *J Mol Biol* **1979**, *129*, (4), 657-74.
174. Wang, B. C.; Yoo, C. S.; Furey, W., Jr.; Sax, M., Automated interpretation of electron density maps as applied to Bence-Jones protein Rhe. *J Mol Biol* **1979**, *135*, (1), 305-8.
175. Wang, B. C.; Huie, B. T.; Schaefer, W. P., Structure of Bis[(salicylaldehyde)ethylenediimine]-dicobalt(III) Dichloride Chloroform Solvate. *Acta Cryst B* **1979**, *35*, 1232-1234.
176. Yoo, C. S.; Wang, B. C.; Sax, M.; Johnson, A. D., Preliminary crystallographic data for Staphylococcus aureus exfoliative toxin. *J Mol Biol* **1978**, *124*, (2), 421-3.
177. Wang, B. C.; Yoo, C. S.; Hwan, R. Y.; Sax, M.; Brown, W. E.; Michaels, M., Structure of Bence-Jones protein, Pav: an initial report. *J Mol Biol* **1977**, *116*, (3), 619-25.
178. Mandel, G. S.; Marsh, R. E.; Schaefer, W. P.; Mandel, N. S.; Wang, B. C., The Structure of Hexamine-m-acetato-di-m-hydroxo-dicobalt Tribromide Trihydrate. *Acta Cryst B* **1977**, *33*, 3185.
179. Lee, J.; Chang, S. C.; Hahn, K.; Glaid, A. J.; Gawron, O.; Wang, B. C.; Yoo, C. S.; Sax, M.; Glusker, J., Crystals of pig heart aconitase. *J Mol Biol* **1977**, *112*, (3), 531-4.
180. Wang, B. C.; Yoo, C. S.; Pletcher, J.; Sax, M., Angle Settings for Rotation Around the Diffraction Vector for Four-Circle Diffractometers. *Acta Cryst A* **1976**, *32*, 918-919.
181. Wang, B. C.; Yoo, C. S.; Sax, M., Structure of a Dimeric Fragment of a Lambda Type Bence Jones Protein. *Acta Cryst A* **1975**, *31*, 530.

182. Wang, B. C.; Sax, M., Structure of a dimeric fragment related to the lambda-type Bence-Jones protein: a preliminary study. *J Mol Biol* **1974**, 87, (3), 505-8.
183. Wang, B. C.; Walker, W. R.; Li, N. C., Bis(5-ethyl,5-phenylbarbiturato)-bis(imidazole) Complexes of Copper (II), Nickel (II), and Cobalt (II). *J. Coord. Chem.* **1973**, 3, 179.
184. Wang, B. C.; Schaefer, W. P.; Marsh, R. E., The Crystal Structure of Pentacyanocobalt (III)-5-cyano-pentaamine-cobalt (III) Monohydrate. *Inorg. Chem.* **1971**, 10, 1492.
185. Wang, B. C.; Craven, B. M., The Synthesis and Crystal Structure Determination of the Bis(5,5-diethylbarbiturato)-bis(imidazole) Complexes of Cobalt (II) and Zinc (II). *Chem. Commun.* **1971**, 290.
186. Wang, B. C.; Cordes, A. W., The Crystal Structure of Dipyrindinium (II) Oxytetrachloroselenate (IV), a Highly Coordinated Selenium Compound. *Inorg. Chem.* **1970**, 9, 1643.
187. Wang, B. C.; Schaefer, W. P., Structure of an Oxygen-Carrying Cobalt Complex. *Science* 1969, 166, (3911), 1404-1406.
188. Furey, W. J.; Wang, B. C.; Yoo, C. S.; Sax, M., Phase Extension and Refinement of Bence-Jones Protein Rho to 1.9Å. *Acta Cryst A* **1969**, 35, 810-817.
189. Wang, B. C.; Cordes, A. W., Increasing the Accuracy of Crystal Orientation Procedures Using the Weissenberg Camera. *Rev. Sci. Instr.* **1967**, 38, 1736.
190. Lai, T. T.; Chen, S. N.; Wang, B. C.; Hsien, C. C., Cathodic Action of the Uranyl-Itaconate Complex at the Dropping Mercury Electrode. *Analytical. Chemistry* **1964**, 36, 26-28.
191. Lai, T. T.; Wang, B. C., Cathodic Action of the Uranyl-Glycolate Complex at the Dropping Mercury Electrode. *Analytical. Chemistry* **1963**, 35, 1531-1533.
192. Lai, T. T.; Wang, B. C., Cathodic Action of the Uranyl-lactate Complex at the Dropping Mercury Electrode. *Analytical. Chemistry* **1963**, 35, 905-908.
193. Lai, T. T.; Wang, B. C., Cathodic Action of the Metal Complexes at the Dropping Mercury Electrode. VII. Lead-Ascorbate Complex. *J. Chinese Chem. Soc.* **1962**, 9, 159-167.
194. Lai, T. T.; Wang, B. C., Polarography and Spectrophotometry of Copper-Glutamate Complex. *J. Chinese Chem. Soc.* **1962**, 9, 26-36.
195. Lai, T. T.; Wang, B. C., Cathodic Action of the Metal Complexes at the Dropping Mercury Electrode. VI. Uranyl-Para-Methylaminophenol Sulfate Complex. *J. Chinese Chem. Soc.* **1962**, 9, 14-25.

Publications - Books

1. Chen, C. J.; Rose, J. P.; Newton, M. G.; Liu, Z. J.; Wang, B. C., Chapter 2 Protein Crystallography. In *Modern Protein Chemistry - Practical Aspects*, Howard, G. C.; Brown, W. E., Eds. CRC Press: Boca Raton, FL, 2002; pp 7-36.

Publications – structures:

Over 130 unique protein crystal structures have been determined and their coordinates have been deposited at the Protein Data Bank.

Invited Oral Presentations (since 1990):

1. The Use of Single-Wavelength Anomalous Scattering Data in the Structure Determination of a Neurophysin-Dipeptide Complex from an Incorporated Iodine Atom, Birmingham Crystallographic Workshop, Birmingham, Alabama, February 27, 1990.
2. Structure of Neurophysin-Dipeptide Complex Determined by a Novel Single-Wavelength Anomalous Scattering Method, Johns Hopkins University, March 26, 1990.
3. T7 RNA Polymerase: Crystal Structure and Functional Homologies to other Prokaryotic and Eukaryotic RNA Polymerases. Johns Hopkins University, March 27, 1990.

4. The Use of Single-Wavelength Anomalous Scattering Data in the Structure Determination of a Neurophysin-Dipeptide Complex from an Incorporated Iodine Atom, *Frontiers in Crystallographic Methods*, American Crystallographic Association Meeting, New Orleans, LA, April 6, 1990.
5. Structure of T7 RNA Polymerase, Gordon Research Conference on Diffraction Methods in Molecular Biology, Colby-Sawyer College, June 11, 1990.
6. Crystal Structure of T7 RNA Polymerase, The 3rd International Symposium and Workshop of the Society of Bioscientists in America, Hong Kong, June 25, 1990.
7. Toward a Better Understanding of the Structure-function Relationship of RNA Polymerase, International Symposium of Structural Biology, Taipei, Taiwan, June 27, 1990.
8. Resolution of Phase Ambiguity in Macromolecular Crystallography by a Noise Filtering Process, Albany Conferences on Converging Approaches in Computational Biology, Albany, New York, September 14, 1990.
9. Macromolecules, Nucleic Acids and Chromosomes, National Taiwan University, Taiwan, October 2, 1990.
10. Structure Determination by the ISIR/ISAS Program Package, Howard Hughes Medical Institute Workshop on Crystallographic Phasing and Refinement, NIH campus, Bethesda, MD, October 22, 1990.
11. Study of Structure-Function of Neurophysin-Hormone System by X-ray Crystallography, Institute of Molecular Biology, Taiwan, December 11, 1990.
12. Crystal Structure of a Neurophysin-Dipeptide Complex Determined by the Use of Single-Wavelength Anomalous Scattering Method, Taiwan Crystallographic Conference, Taipei, Taiwan, April 8, 1991.
13. T7 RNA Polymerase: Crystal Structure and Functional Homologies to Other Prokaryotic and Eukaryotic RNA Polymerases, National Tsing-Hua University, Taiwan, April 14, 1991.
14. T7 RNA Polymerase: Crystal Structure and Functional Homologies to Other Prokaryotic and Eukaryotic RNA Polymerases. Seventh Conversation in the Discipline Biomolecular Stereodynamics, Albany, NY, June 22, 1991.
15. Resolving the Controversy Surrounding the Structure of the Octameric Histone Core of the Nucleosome: The Crystal Structure at 3Å Resolution, University of Pittsburgh, Pittsburgh, PA, September 19, 1991.
16. T7 RNA Polymerase: Low Resolution Structure and Its Biological Implications, University of Arkansas, Fayetteville, AR, September 23, 1991.
17. T7 RNA Polymerase: Low Resolution Structure and Its Biological Implications, The 49th Annual Pittsburgh Diffraction Conference, Columbus, Ohio, November 7, 1991.
18. T7 RNA Polymerase: Low Resolution Structure and Its Biological Implications, International Symposium on Molecular Structure and Life - Molecular Recognition of Nucleic Acids, Yokohama, Japan, December 12, 1991.
19. Crystal Structure of T7 RNA Polymerase, Osaka University, Osaka, Japan, December 16, 1991.
20. Crystal Structure of T7 RNA Polymerase, Colorado State University, Fort Collins, Colorado, March 27, 1992.
21. Structure of T7 RNA Polymerase, Keystone Symposium on Fundamental Mechanisms of Transcription, Copper Mountain, Colorado, April 1, 1992.
22. Structure of T7 RNA Polymerase, Symposium on Structural Tools for the Analysis of Protein-Nucleic Acid Complexes, Wildbad Kreuth, Germany, May 6, 1992.
23. Structure Determination of Glutamine-Binding Protein of *E. coli* With and Without Bound L-Glutamine by X-ray Diffraction, The 4th International Symposium and Workshop of the Society of Chinese Bioscientists in America, University of Singapore, Singapore, June 15, 1992.
24. Crystal Structure of T7 RNA Polymerase, Pennsylvania State University, University Park, PA, September 22, 1992.
25. Structural Studies of Neurophysin-Hormone Complexes, The 2nd China-Japan Joint Seminar on Crystallography, Taipei, Taiwan, November 9-10, 1992.
26. Crystal Structure of T7 RNA Polymerase at 3.3Å Resolution, Fox Chase Cancer Center, Philadelphia, PA, March 4, 1993.
27. Structure Determination of Octameric Histone Core of Nucleosome, Fox Chase Cancer Center, Philadelphia, PA, March 5, 1993.
28. Crystal Structure of T7 RNA Polymerase at 3.3Å Resolution, Thomas Jefferson University, Philadelphia, PA, April 1, 1993.

29. The Octameric Histone Core of Nucleosome: What We Learn From the Structure Determination. American Crystallographic Association Annual Meeting, Albuquerque, New Mexico, May 24, 1993.
30. Structure of Bacteriophage T7 RNA Polymerase at 3.3Å Resolution. The 5th International Symposium and Workshop of the Society of Chinese Bioscientists in America, Baltimore, MD, June 17, 1993.
31. Structure of Bacteriophage T7 RNA Polymerase at 3.3Å Resolution. The XVI Congress and General Assembly of the International Union of Crystallography, Beijing, China, August 22, 1993.
32. T7 RNA Polymerase: Structural Aspects and Relationships to Other Nucleic Acid Polymerases. University of Missouri-Kansas City, MI, October 14, 1993.
33. The Cuddle Compound and Its Cradle, The Department of Biological Sciences Annual Retreat, University of Pittsburgh, Pittsburgh, PA, October, 1993.
34. Crystal Structure of T7 RNA Polymerase, Agouron Pharmaceuticals, La Jolla, CA, November 11, 1993.
35. T7 RNA Polymerase: Structural Aspects and Relationship to Other Nucleic Acid Polymerases, Georgia Institute of Technology, Atlanta, GA, November 15, 1993.
36. T7 RNA Polymerase: Structural Aspects and Relationship to Other Nucleic Acid Polymerases, University of Georgia, Athens, GA, November 16, 1993.
37. T7 RNA Polymerase: Structural Aspects and Relationship to Other Nucleic Acid Polymerases, Tsing-Hua University, Taiwan, December 7, 1993.
38. T7 RNA Polymerase: Crystal Structure and Biological Implications "The 10th Federation of Asian and Oceanian Biochemists Symposium on Protein Research," Taipei, Taiwan, December 8-10, 1993.
39. Phase Refinement and Extension by Density Modification, Asian Region Seminar on Crystallography in Molecular Biology, December 9-14, 1993.
40. Structures of Nucleic Acid Polymerases, Asian Region Seminar on Crystallography in Molecular Biology, December 9-14, 1993.
41. Structural Studies of Neurophysin and its Hormone Complexes. Recent Developments in Macromolecular Crystallography, XXV National Seminar on Crystallography, Madras, India, December 15-17, 1993.
42. Development of the Solvent Flattening Methods for Macromolecular Structure Determination. Ohio State University, OH, October 31, 1994.
43. Crystal Structure of T7 RNA Polymerase. Ohio State University, OH, November 1, 1994.
44. A Unified Mechanism for the Modular Architecture of Nucleic Acid Polymerases. Structural Biology/Biophysics Society Meeting, Taipei, Taiwan, May 11, 1995.
45. Crystal Structure of T7 RNA Polymerase. National Institute of Genetics, Japan, May 15, 1995.
46. Structure of an Oxytocin-Neurophysin Complex and its Implication on the Hormone Storage in the Neurosecretory granules. The 6th International Symposium and Workshop of the Society of Chinese Bioscientists in America, Vancouver, June 25, 1995.
47. Heavy Atom Handedness and Protein Structure Determination using Single-wavelength Anomalous Scattering Data. American Crystallographic Association Annual Meeting, Montreal, July 25, 1995.
48. Crystallography: a Window into the World of Molecules. Department of Cellular Biology, University of Georgia, April 17, 1996.
49. Structure of Aldehyde Dehydrogenase. Suddath Memorial Symposium, Georgia Institute of Technology, April 20, 1996.
50. Crystallography: a Window into the World of Molecules - Part II. Symposium series on Computational and Experimental Approaches to Molecular Structure, Department of Biochemistry and Molecular Biology, University of Georgia, May 10, 1996.
51. Structure of an Aldehyde Dehydrogenase Complex with Co-enzyme NAD. 8th International Symposium on Enzymology and Molecular Biology of Carbonyl Metabolism, Deadwood, South Dakota, June 30, 1996.
52. How Does Solvent Flattening Remove the Phase Ambiguity. XVII Congress and General Assembly of the International Union of Crystallography, Seattle, WA, August 12, 1996.
53. How Does Solvent Flattening Remove the Phase Ambiguity. 54th Annual Pittsburgh Diffraction Conference, Pittsburgh, PA, November 7-9, 1996.

54. Hormone Packaging in Posterior Pituitary Revealed by X-Ray Crystallographic Studies. Institute of Molecular Medicine and Genetics, Medical College of Georgia, February 25, 1997.
55. Crystallographic programs at the University of Georgia. University of Arkansas, March 23, 1998.
56. University of Georgia. July 26, 1998.
57. XVIIIth International Congress of Crystallography, Glasgow, Scotland, August, 1999.
58. Protein Structure Determination from Native Crystals Using Single-wavelength Anomalous Scattering Data. Utah State University, November 10, 1999.
59. Protein Structure Determination from Native Crystals Using Single-wavelength Anomalous Scattering Data. Argonne National Laboratory, November 17, 1999.
60. Protein Crystallography in the Next Decade: A personal Observation. BMB, UGA. March 23, 2000.
61. ISAS Method. ISAS Workshop, GA Center for Continuing Education, April 6-7, 2000.
62. Protein Structure Determination from Native Crystals Using Single-wavelength Anomalous Scattering Data. Agouron Pharmaceuticals, Inc., San Diego, California, April 22, 2000.
63. Protein Structure Determination from Native Crystals Using Single-wavelength Anomalous Scattering Data. University of Colorado Health Sciences Center, Denver, Colorado, April 24, 2000.
64. Towards Increased Data Collection Efficiency through Automation and Time-Sharing. Stanford Synchrotron Research Facility, Stanford, California, May 11, 2000.
65. SAS Phasing a Powerful Tool for Protein Crystal Structure Determination is Maturing. ACA Annual Meeting, St. Paul, Minnesota, July 2000.
66. Direct Crystallography and The Southeast Collaboratory for Structural Genomics. Institute of Molecular Biology, Academia Senica, Taiwan, October 30, 2000.
67. Development of Biological Beamlines for the Southeast Regional Collaborative Access Team at the Advanced Photon Source. Synchrotron Radiation Research Center, Taiwan, October 26, 2000.
68. Meeting the Challenges of High-throughput Structure Determination for Structural Genomics. International Conference on Structural Genomics 2000, Yokohama, Japan, November 2, 2000.
69. Comments on Automation, Harima Workshop on High-throughput Crystallography, Spring-8, Harima, Japan, November 7, 2000.
70. Protein Structure Determination from Native Crystals Using Single-wavelength Anomalous Scattering Data. Harima Workshop on High-throughput Crystallography, Spring-8, Harima, Japan, November 7, 2000.
71. The Crystal Structure and Functional Implications of Yeast Mitochondrial Transcription Factor sc-mtTFB & Structural Genomics Projects at the University of Georgia. University of Toronto, Canada, November 9, 2000.
72. Protein Structure Determination from Native Crystals Using Single-wavelength Anomalous Scattering Data. McMaster University, Hamilton, Canada, November 10, 2000.
73. Recovery of Non-productive Beamtime. European Synchrotron Radiation Facility, France, February 2001.
74. Southeast Collaboratory for Structural Genomics. Second International Conference of Structural Genomics, Warrenton, VA, April 4, 2001.
75. Methodology and Technology Development for Structural Genomics. Annual Meeting of the Canadian Society of Microbiology, Waterloo, Canada, June 13, 2001.
76. Lecturer, American Crystallographic Association Summer School, GA Center for Continuing Education, June 7-19, 2001.
77. Direct Crystallography and Sulfur Phasing. Crystallography Workshop, European Synchrotron Research Facility, Grenoble, France. June, 23, 2001.
78. Sulfur Phasing. Instituto de Tecnologia Quimica e Biologica, Universidade Nova De Lisboa, Lisbon, Portugal, June 26, 2001.
79. Methodology and Technology Development for Structural Genomics at the South East Collaboratory for Structural Genomics. Georgia State University, October 5, 2001.
80. Methodology and Technology Development for Structural Genomics at the South East Collaboratory for Structural Genomics. Emory University, October 8, 2001.
81. Southeast Collaboratory for Structural Genomics. NIH, Bethesda, MD, October 21-23, 2001.

82. Crystal Structure Determination from Native Crystals. Pittsburgh Diffraction Conference, Cincinnati, OH, October 24-26, 2001.
83. Direct Crystallography and the Southeast Collaboratory for Structural Genomics. Keystone Symposium, Breckenridge, CO, January 7, 2002.
84. Southeast Collaboratory for Structural Genomics: Methodology and Technology Development. University of Alabama in Huntsville, Huntsville, Alabama, February 15, 2002.
85. Computational Methods to Extract Phase Information from Single Wavelength Data: Theory and Practice. ACA Meeting, San Antonio, Texas, May 26, 2002.
86. Direct Crystallography and the Southeast Collaboratory for Structural Genomics. Second Tsinghua International Conference of Protein Sciences, Tsinghua University, Beijing, China, June 4, 2002.
87. The Iterative Single-wavelength Anomalous Scattering method for Phasing Macromolecular Structures. The ISAS Workshop, Tsinghua University, Beijing, China, June 6, 2002.
88. Methodology and Technology Development for Structural Genomics At the Southeast Collaboratory for Structural Genomics. Shanghai University, Shanghai, China, June 14, 2002.
89. Automation in Protein Crystallography Data Collection - An Overview. 2002 Gordon Research Conference on Diffraction Methods in Structural Biology, New London, Connecticut, July 15, 2002.
90. Direct Crystallography: Phasing from Native Crystals. 2002 Gordon Research Conference on Diffraction Methods in Structural Biology, New London, Connecticut, July 15, 2002.
91. Sulfur Phasing and Direct Crystallography. International Union of Crystallography Conference, Geneva, Switzerland, August 5, 2002.
92. Meeting the Challenges of High-throughput Structure Determination for Structural Genomics. Pittsburgh Diffraction Conference, Pittsburgh, PA, October 5, 2002.
93. Progress Towards Direct Macromolecular Crystallography. Workshop on Automated Structure Determination, International Structural Genomics Organization meeting, Berlin, Germany, October 8, 2002.
94. The Southeast Collaboratory for Structural Genomics. NIH Joint meeting of PSI Research Center PIs and the PSI Advisory Committee, NIGMS/NIH Bethesda, MD, November 14, 2002.
95. Meeting the Challenges of High-throughput Structure Determination for Structural Genomics. National Cancer Institute, Frederick, MD, November 15, 2002.
96. Direct Crystallography. 31th Annual Mid-Atlantic Protein Crystallography Meeting, Durham, North Carolina, May 23, 2003.
97. Structural Genomics and Direct Crystallography. Biotech Symposium 2003 In Honor of Dr. Ahmed Abdelal, Atlanta, Georgia, June 16, 2003.
98. Structural Genomics and Their Impact to Protein Crystallography. Bruker Biocrystallography Workshop, Madison, Wisconsin, October 1, 2003.
99. Integration of Multiple Genomics and Multiple Technologies. Target Selection Workshop, NIH, November 13, 2003.
100. Progress in the Southeast Collaboratory for Structural Genomics. NIH Joint meeting of PSI Research Center PIs and the PSI Advisory Committee, NIGMS/NIH Bethesda, MD, December 2, 2003.
101. SECSG Protein-to-Structure Pipeline: Potential and Limitations. Sandia National Laboratory, Sandia, CA, March 22, 2004.
102. SECSG Protein-to-Structure Pipeline: Potential and Limitations. ORNL, Oak Ridge, TN, April 12, 2004.
103. Structural Genomics and Protein Crystallography at SECSG. University of Tokyo, Tokyo, Japan, April 16, 2004.
104. Integration of Technology for Structural Genomics. The 1st Pacific-Rim International Conference on Protein Science, Yokohama, Japan, April 18, 2004.
105. SECSG Protein-to-Structure Pipeline. Mayo Clinic, May 14, 2004.
106. Integration of Technology for Structural Genomics. Symposium on Biomedical Computing, Georgia State University, May 25, 2004.
107. Production of Better Quality Crystals. International Conference on Crystallization of Biological Macromolecules, Beijing, China, July 7, 2004.

108. Building SAS Phasing Tools for Unlabelled Native Crystals. Gordon Research Conference, Lewiston, MN, July 12, 2004.
109. SECSG Year 4 Progress Report. NIH Joint meeting of PSI Research Center PIs and the PSI Advisory Committee, NIGMS/NIH Bethesda, MD, October 28, 2004.
110. Light When You Need It: SER-CAT's Synchrotron at the Advanced Photon Source. Pittsburgh Diffraction Conference, Pittsburgh, PA, October 30, 2004.
111. Technology Development at SECSG Applicable to High-Throughput Structural Genomics. 2004 International Conference on Structural Genomics, Washington DC, November 19, 2004.
112. High-Throughput, High-Quality, Cost-Effective Structure Determination Using Both In-House and Synchrotron X-rays, Protein Crystallography in Drug Discovery 2005, South San Francisco, Jan. 18, 2005.
113. From Adolescence to Maturity at SECSG: What, Why and Where We Stand in Technology Development. Protein Purification and Crystallization Workshop 2005, NIH, Feb. 2-3, 2005.
114. Structural Genomics and Neutron Diffraction: Potential, leveraging Investments and Timing. Application of Neutrons in Biomedical Research – A presentation to the Program Directors of NSF, NIH/NIBIB, NIH/NCI, NIH/NCRR, NIH/NIGMS, NIH/NICHHD, NIST, DOE. Natcher Conference Center, Bethesda, Maryland, Feb. 15, 2005.
115. Progress on Cost-Effective High-Quality Structure Determination, 2nd Bilateral Japan-UK Symposium on Structural Genomics and Proteomics, RIKEN Yokohama Institute, Yokohama, Japan, May 28-30, 2005.
116. Structural Genomics Tools Applicable to Structural Biology – Science at the Interface, Oak Ridge National Laboratory, Oak Ridge, Tennessee, June 20, 2005.
117. If You Build It “We” Will Come – Past Experiences and Predictions, Conference on New Frontier in Neutron Macromolecular Crystallography, ORNL, Oak Ridge, Tennessee, July 12-13, 2005.
118. HT Structure Determination at SER-CAT: Five Structures in 23 Hours. IUCr2005, Florence, Italy, August 23-31, 2005.
119. Progress on Cost-Effective High-Quality Structure Determination, Structural Proteomics in Europe (SPINE) Congress 2005, Montecatini Terme, Italy, September 1-2, 2005.
120. Structural Genomics and Proteomics – An Introduction and Overview, 1st UK-Southeast USA Symposium on Structural Genomics and Proteomics in Membrane and Metalloproteins, University of Georgia, Athens, Georgia, October 14, 2005.
121. Progress in Sulfur Phasing and Direct Crystallography, International Conference on High-throughput Phasing,, Peking University, Beijing, China, October 31, 2005.
122. Sulfur Phasing and Direct Crystallography, Institute of Biophysics, Chinese Academy of Sciences, Beijing, China, November 1, 2005.
123. Structural Genomics Efforts at the University of Georgia, Tainjin Medical University, Taijing, China, November 4, 2005.
124. Sulfur Phasing and Direct Crystallography, Hauptman-Woodward Medical Research Institute, Buffalo, New York, November 16, 2005.
125. Progress on Cost-Effective High-Quality Structure Determination, Memorial Symposium, Japan Pharmaceutical Consortium, Osaka, Japan, December 1, 2005.
126. Progress on Soft-X-Ray Phasing & Cost-Effective High-Quality Structure Determination, Winter School on Soft X-rays in Macromolecular Crystallography. Seefeld, Austria, March 22-25, 2006.
127. Theoretical Aspects of Sulfur SAD Phasing and Direct Crystallography, First Annual SAD Workshop, University of Texas, M. D. Anderson Cancer Center, Houston, April 3-4, 2006.
128. Structural Genomics of Non-Pfam Targets, Bi-Cheng Wang, University of St. Andrews, Scotland, August 29, 2006.
129. Global Structural Proteomics Initiative, University of Leeds, Leeds, England, August 30, 2006.
130. Global Structural Proteomics Initiative & Structural Genomics of Non-Pfam Targets, CCLRC, Daresbury Laboratory, Cheshire, England, August 31, 2006.
131. SAD Phasing: Status and Future Directions, Bruker AXS Meeting, Delft, Netherlands, September 22, 2006.

132. A Report on the Global Structural Proteomics Initiative and UGA's Structural Genomics of Non-Pfam Targets, ICSG2006, Beijing, China, October 22-26, 2006.
133. A Report on the Global Structural Proteomics Initiative and UGA's Structural Genomics of Non-Pfam Targets, National Tsing Hua University, Hsin-chu, Taiwan, November 16, 2006.
134. SER-CAT: The First 10 Years, The SER-CAT Symposium 2007, Frederick, MD, March 16, 2007.
135. A Report on the Global Structural Proteomics Initiative: Future Directions and Perspectives, Xiang Shan Conference, Beijing, China, April 14, 2007.
136. Remaining Challenges In Long Wavelength Phasing: the SER-CAT Approach. 9th International Conference on Biology and Synchrotron Radiation, Manchester, England. August 16, 2007.
137. Pushing the Boundaries of Structural Biology. University of Pittsburgh, Pittsburgh, PA, September 15, 2007.
138. UGA Structural Genomics and Beyond: SECSG, SER-CAT, GoSPI and BPSPI. National Tsinghua University, November 2, 2007
139. Long Wavelength Phasing: Current and Future Challenges, 8th Asian Crystallographic Association Meeting, Taipei, November 4-8, 2007.
140. Light When YOU Need it: SER-CAT's Beamlines at the Advanced Photon Source. International Conference on Synchrotron Radiation and Biology, Institute of Biological Sciences, Shanghai, China, November 7-8, 2007.
141. A Beamline for Direct Crystallography at NSRRRC. Bio-Beamline Steering Committee Meeting, Taiwan Light Source, Academia Sinica, Taipei, Taiwan, ROC., February 14, 2008.
142. Direct Crystallography. Daresbury Laboratory, Warrington, Cheshire, UK, May 1, 2008.
143. Solvent Flattening/SIR and SAD Phasing. Institute of Biophysics, Chinese Academy of Sciences, Beijing, China, May 8, 2008.
144. A Multiple Data Set Data Collection Strategy for A Better Data Set Within a Fixed X-ray Dose and Signal-Based Data Collection. ACA Workshop on Wise Use of Dose: Structure Solvability vs. Structure Integrity. Knoxville, Tennessee, May 31, 2008.
145. Resolution of Phase Ambiguity in Macromolecular Crystallography: 25 Years Later. A. Lindo Patterson Symposium, 2008 ACA Meeting, Knoxville, Tennessee, June 4, 2008.
146. Signal-Based Data Collection: A Novel Approach to On-site Auto-Structure Determination at SER-CAT. XXI Congress of International Union of Crystallography, Osaka, Japan. August 13, 2008.
147. On the Use of Multiple Sets of Diffraction Data. Bruker User Meeting, Delft, Netherlands, October 1, 2008.
148. 25 Years of SAS Phasing. John Rose and B.C. Wang. 66th Pittsburgh Diffraction Conference. November 1, 2008
149. The S-SAD Approach for Macromolecular Phase Determination. EMBL-Sponsored World Lecture entitled Recent Developments in Macromolecular Crystallography. Pune, India, November 10-14, 2008.
150. Sulfur Phasing from Noise Filtering to Beamline Optimization. Winter School on Soft X-rays in Macromolecular Crystallography. Berlin, Germany, February 18-20, 2009.
151. Pushing the Boundaries of Structural Biology: UGA Structural Genomics and Beyond. Georgia Institute of Technology, March 10, 2009.
152. Recent Examples on Successful Sulfur Phasing. The 6th Annual SER-CAT Symposium. Huntsville, Alabama. March 20, 2009.
153. S-SAD Phasing Theory and Successful Applications. One-Day S-SAD Workshop, Pittsburgh Diffraction Conference. University of Georgia, October 28, 2009.
154. Southeast Regional Collaborative Access Team. APS SAC Cross-Cut Review of Macromolecular Crystallography, APS, ANL, January 19, 2010.
155. A Suggestion. Discussion Meeting on APS Upgrades for Next 10 Years, APS, ANL, January 19, 2010.
156. A Multiple-Data-Set Data Collection Strategy for Producing Better Data Within a Fixed X-ray Dose: Some Recent Examples. Annual Meeting of the Chinese Crystallographic Society, Sanya, Hainan, China, March 5, 2010.
157. The MDS Strategy: Collecting Multiple Data Sets With Short (low dose) Exposures Can Produce Better Data Than Traditional Long (high dose) Exposures Within a Fixed Total X-ray Dose. The 7th Annual SER-CAT Symposium. Oak Ridge National Laboratory, March 19, 2010.

158. The S-SAD Approach for Phase Determination at SER-CAT. Swiss Light Source, Paul Scherrer Institut, Villigen, Switzerland, May 7, 2010.
159. SAD Theory and Sulfur Phasing: Some Historical Aspects. American Crystallographic Association S-SAD Workshop, University of Chicago, Chicago, IL, July 24, 2010
160. The MDS Approach for Data Collection. 2010 ACA Annual Meeting, Sheraton Towers, Chicago, IL July 27, 2010.
161. The MDS Approach for Data Collection. 17th Bruker User's Meeting, Siemens Industrial Park, Karlsruhe, Germany, September 22, 2010.
162. Historical Perspective on Phasing for Macromolecular Structures, SIR, SAD and S-SAD. Pittsburgh Diffraction Conference, Pittsburgh, PA, October 29, 2010.
163. Sulfur Phasing: The MDS Approach for Data Collection And A Proposal for a Dedicated, New Type of Beamline at the APS. University of Alabama at Birmingham, Birmingham, AL, November 5, 2010.
164. Recent Interest in Macromolecular Crystallography Using Non-Traditional X-ray Wavelengths. UGA Center for Drug Discovery, University of Georgia, February 21, 2011.
165. Recent Interest in Macromolecular Crystallography Using Non-Traditional X-ray Wavelengths. Frontiers of Protein Sciences: from Structure to Function" In conjunction with the Centenary Celebration of Tsinghua University, Tsinghua University, Beijing, China, April 16, 2011.
166. Extended Wavelength X-ray Macromolecular Crystallography. APS Facility-Specific Workshop on Extended Wavelength X-ray Crystallography during 2011 APS/CNM/EMC Users Meeting. May 4, 2011.
167. Recent Efforts on (Routine) Phase Determination by S-SAD. 2011 Congress of International Union of Crystallography, Madrid, Spain. August 24, 2011.
168. A General Introduction to the Use of Softer X-rays in MX. 4th Winter School on Soft X-rays in Macromolecular Crystallography. European Synchrotron Radiation Facility, Grenoble, France, February 6, 2012.
169. Forward Looking Possibilities on Beamlines Having Optimized Extended Wavelength X-ray Capabilities. 9th Annual SER-CAT Symposium. University of Kentucky, March 16, 2012.
170. Forward Looking Possibilities on Beamlines Having Optimized Extended Wavelength X-ray Capabilities. (Thoughts on New MX Applications with Synchrotron X-rays). Life Science R&D Workshop, APS, ANL. May 2, 2012.
171. Forward-looking Science Enabled by Optimized Extended Wavelength X-ray Sources for Macromolecular Crystallography: A General Introduction. 2012 American Crystallographic Association Annual Conference, Boston, MA, July 31, 2012.
172. The MDS Data Collection Strategy Applied to A Single Crystal, Its Implications to Radiation Dose Reduction and Signal/Noise Enhancement for S-SAD Phasing (Single-Wavelength Phasing for Macromolecules and Methodology Development for Single Crystal X-SAD). Xi'an, China, August 24, 2012.

Abstracts of Additional Presentations (mostly posters):

1. The Crystal Structure of Pentaaminecobalt(II)-u-Cyano-Pentacyano-Cobalt(III) Monohydrate. B. C. Wang, W. P. Schaefer and R. M. Marsh, Abstr. L4, American Crystallographic Association Winter Meeting, New Orleans, LA, March 1970.
2. The Crystal Structures of Bis(5, 5'-diethylbarbiturato) bis(imidazole) Complexes of Cobalt(II) and Zinc (II). B. C. Wang and B. M. Craven, Abstr. J7, American Crystallographic Association Winter Meeting, Columbia, SC, February 1971.
3. The Crystal Structures of the Green and the Orange Forms of Bis(5, 5'-diethylbarbiturato) bis(imidazole) Complexes of Nickel (II). B. C. Wang and B. M. Craven, Abstr. H2, American Crystallographic Association Winter Meeting, Albuquerque, NM, April 1972.
4. Structure of a Dimeric Fragment Related to a I Type Bence Jones Protein. B. C. Wang, C. S. Yoo and M. Sax, Abstr. O7, American Crystallographic Association Summer Meeting, University Park, PA, August 1974.
5. Phase Extension and Refinement of Bence Jones Protein Rhe. W. Furey Jr., B. C. Wang, C. S. Yoo and M. Sax, 36th Annual Pittsburgh Diffraction Conference, Pittsburgh, PA, November 1978.

6. Refinement and Structure of Bence Jones Protein (1.6Å). W. Furey Jr., B. C. Wang, C. S. Yoo and M. Sax, Abstr. N3, American Crystallographic Association Winter Meeting, Honolulu, Hawaii, March 1979.
7. On Relative Displacement Methods for Comparing Protein Structures. B. C. Wang, W. Furey Jr., C. S. Yoo and M. Sax, Abstr. PA22, American Crystallographic Association Summer Meeting, Boston, MA, August 1979.
8. Solvent Structure in a Bence Jones Protein at 1.6Å Resolution. W. Furey Jr., B. C. Wang, C. S. Yoo and M. Sax, American Chemical Society Meeting, Washington D.C., September 1979.
9. Rotation Function Studies of Bovine Neurophysin II - Dipeptide Complex at 5.0Å Resolution. W. Furey Jr., B. C. Wang, C. S. Yoo and M. Sax, 37th Annual Pittsburgh Diffraction Conference, Purdue University, November 1979.
10. Hydrogen Bonding and Water Structure in Bence Jones Protein Rhe at 1.6Å Resolution. W. Furey Jr., B. C. Wang, C. S. Yoo and M. Sax, 37th Annual Pittsburgh Diffraction Conference, Purdue University, November 1979.
11. Array Processors and Crystallography. W. Furey Jr., B. C. Wang and M. Sax, Abstr. G1, American Crystallographic Association Summer Meeting, Calgary, Canada, August 1980.
12. Crystallographic Study on Staphylococcal Exfoliative Toxin. C. S. Yoo, D. S. C. Yang, B. C. Wang and M. Sax, Abstr. 01.1-02, XII International Congress of Crystallography, Ottawa, Canada, August 1981.
13. Protein Structure Determination by the Single Isomorphous Replacement Method with a Phase Selection and Refinement Process. B. C. Wang, Abstr. 01.2-01, XII International Congress of Crystallography, Ottawa, Canada, August 1981.
14. Crystallographic Studies of Neurophysin-Dipeptide Complexes. J. P. Rose, C. S. Yoo, W. Furey Jr., B. C. Wang and M. Sax, Abstr. 02.1-49, XII International Congress of Crystallography, Ottawa, Canada, August 1981.
15. The Crystal Structure of (s) and (r) Baclofen and Carbamazepine. C. H. Chang, D. S. C. Yang, C. S. Yoo, B. C. Wang and M. Sax, Abstr. 03.3-06, Abstr. XII International Congress of Crystallography, Ottawa, Canada, August 1981.
16. The Crystal Structure of Thiamine Dinitrate. D. S. C. Yang, C. S. Yoo, W. Furey, Jr., B. C. Wang, J. Pletcher and M. Sax, Abstr. 03.4-5, XII International Congress of Crystallography, Ottawa, Canada, August 1981.
17. Conformational Energy Analysis of Bence Jones Protein Rhe. A. Chatterjee, B. C. Wang, W. Furey Jr., C. S. Yoo and M. Sax, Abstr. 17.6-01, XII International Congress of Crystallography, Ottawa, Canada, August 1981.
18. Crystallographic Computing on an Attached Array Processor. W. Furey Jr., B. C. Wang and M. Sax, Abstr. 18.X-02, XII International Congress of Crystallography, Ottawa, Canada, August 1981.
19. Phasing Macromolecular Structure by an Iterative Single Isomorphous Replacement Method. B. C. Wang, Abstr. F5, American Crystallographic Association Winter Meeting, Gaithersburg, MD, March 1982.
20. New Crystal Forms of Bovine Neurophysin II-Dipeptide Complexes. J. Rose, C. S. Yoo, W. Furey Jr., B. C. Wang and M. Sax, Abstr. PD3, American Crystallographic Association Summer Meeting, San Diego, CA, August 1982.
21. Single Crystals of the Iron-Sulfur Enzyme Aconitase. A. H. Robbins, C. D. Stout, D. Piszkiwicz, O. Gawron, C. S. Yoo, B. C. Wang and M. Sax, Abstr. PD6, American Crystallographic Association Summer Meeting, San Diego, CA, August 1982.
22. Crystallographic Study on Staphylococcal Exfoliative Toxin. D. S. C. Yang, C. S. Yoo, B. C. Wang and M. Sax, PD12, American Crystallographic Association Summer Meeting, San Diego, CA, August 1982.
23. Phasing Macromolecular Structures by an Iterative Anomalous Scattering Method and a Fully Automated Procedure for Accurately Defining the Protein-Solvent Boundary. B. C. Wang, Abstr. PE8, American Crystallographic Association Summer Meeting, San Diego, CA, August 1982.
24. Crystal Structure (4.5Å) of Bence Jones Protein Pav. C. S. Yoo, D. Yang, W. Furey Jr., C. H. Chang, B. C. Wang and M. Sax, Abstr. PD18, American Crystallographic Association Summer Meeting, San Diego, CA, August 1982.
25. The Structure of Calmodulin at 3.0Å Resolution. J. S. Sack, W. J. Cook, C. E. Bugg and B. C. Wang, Abstr. K2, American Crystallographic Association Winter Meeting, Columbia, MO, March 1983.
26. The Crystal Structure of a Bence-Jones Protein Dimer. C. H. Chang, M. T. Short, M. Schiffer, B. C. Wang and W. Furey Jr., Abstr. PD13, American Crystallographic Association Summer Meeting, Snowmass, CO, August 1983.
27. Integrated Program Package for Phasing SIR or Single-Wavelength Anomalous Scattering Data. B. C. Wang, Abstr. B3, American Crystallographic Association Summer Meeting, Snowmass, CO, August 1983.

28. Direct Determination of SAS Phase Information. D. S. C. Yang, Z. B. Xu, W. Furey Jr. and B. C. Wang, Abstr. PC1, American Crystallographic Association Spring Meeting, Lexington, KY, May 1984.
29. Direct Determination of SIR Phase Information by an Extension of Karle's Rule. Z. B. Xu, D. S. C. Yang, W. Furey Jr., M. Sax, J. P. Rose and B. C. Wang, Abstr. PC2, American Crystallographic Association Spring Meeting, Lexington, KY, May 1984.
30. Direct Determination of SAS Phase Information. D. S. C. Yang, Z. B. Xu, W. Furey Jr. and B. C. Wang, Abstr. 01.2-4, XIII International Congress of Crystallography, Hamburg, Federal Republic of Germany, August 1984.
31. Direct Determination of SIR Phase Information by an Extension of Karle's Rule. Z. B. Xu, D. S. C. Yang, W. Furey Jr., M. Sax, J. P. Rose and B. C. Wang, Abstr. 01.2-6, XIII International Congress of Crystallography, Hamburg, Federal Republic of Germany, August 1984.
32. A Method for Resolving Phase Ambiguity in SIR or Single-Wavelength Anomalous Scattering Data. B. C. Wang, Abstr. 01.2-7, XIII International Congress of Crystallography, Hamburg, Federal Republic of Germany, August 1984.
33. Crystal Structure of Bence Jones Protein Pav. J. P. Rose, D. Yang, Z. B. Xu, W. Furey Jr., C. S. Yoo, B. C. Wang and M. Sax, Abstr. 01.4-3, XIII International Congress of Crystallography, Hamburg, Federal Republic of Germany, August 1984.
34. On the Conservation of Protein-Solvent Interactions in Immunoglobulin Variable Domains. S. Swaminathan, W. Furey Jr., C. S. Yoo, B. C. Wang and M. Sax, Abstr. 02.12-2, XIII International Congress of Crystallography, Hamburg, Federal Republic of Germany, August 1984.
35. Crystal Structure of Bence Jones Protein Pav at 2.8Å. J. P. Rose, S. Swaminathan, D. Yang, W. Furey, C. S. Yoo, B. C. Wang and M. Sax, Abstr. PB15, American Crystallographic Association Summer Meeting, Stanford, CA, August 1985.
36. On the Case of Protein Structure Determination in Space Group P1 Using One Isomorphous Derivative Which Contains Only One Substituted Heavy Atom. B. C. Wang, Abstr. PB22, American Crystallographic Association Summer Meeting, Stanford, CA, August 1985.
37. Structure Determination of Cd, Zn Metallothionein Using Anomalous Scattering Data from Native Crystals. B. C. Wang, W. Furey, A. H. Robbins, L. L. Clancy and C. D. Stout, 43rd Pittsburgh Diffraction Conference, Pittsburgh, PA, November 1985.
38. Recent Experiences With the Use of SIR and/or Single-Wavelength Anomalous Scattering Data in the Macromolecular Phasing Process. B. C. Wang, Abstr. L1, American Crystallographic Association Annual Meeting, McMaster University, Ontario, Canada, June 1986.
39. A New Crystal Form of Ricin-OR. W. R. Chang, L. Chen, C. H. Wei, L. Abrams, M. Sax and B. C. Wang, Abstr. P5, 44th Annual Pittsburgh Diffraction Conference, Pittsburgh, PA, October 1986.
40. Preliminary Crystal Data of a Glutamine Binding Protein. P. Chen, Y. J. Chung, B. C. Wang, Q. Shen, P. F. Cottam and C. Ho, Abstr. P6, 44th Annual Pittsburgh Diffraction Conference, Pittsburgh, PA, October 1986.
41. The New X-ray Diffraction Facility for Macromolecular Studies at the University of Pittsburgh. J. P. Rose and B. C. Wang, Abstr. P10, 44th Annual Pittsburgh Diffraction Conference, Pittsburgh, PA, October 1986.
42. Crystal Structure of Soybean Trypsin Inhibitor, E-II, a Member of the Bowman-Birk Inhibitor Family. P. Chen, J. P. Rose, C. H. Wei and B. C. Wang, Abstr. P10, 45th Annual Pittsburgh Diffraction Conference, Charlottesville, VA, November 1987.
43. Factors Affecting the Data Reproducibility on an Area Detector. J. P. Rose and B. C. Wang, Abstr. P13, 45th Annual Pittsburgh Diffraction Conference, Charlottesville, VA, November 1987.
44. Progress in the Determination of the Structure of the Octameric Histone Core of the Nucleosome. B. C. Braden, G. Arents, W. E. Love, E. N. Moudrianakis and B. C. Wang, Abstr. PD5, American Crystallographic Association Annual Meeting, Philadelphia, PA, June 1988.
45. Crystals of Bacteriophage T7 RNA Polymerase. R. Sousa, E. M. Lafer, J. P. Rose and B. C. Wang, Abstr. PD17, American Crystallographic Association Annual Meeting, Philadelphia, PA, June 1988.
46. Crystal Structure of a Bowman-Birk Type Inhibitor, PI-II at 2.5Å Resolution. P. Chen, J. P. Rose, R. Love, C. H. Wei and B. C. Wang, Abstr. PJ16, American Crystallographic Association Annual Meeting, Philadelphia, PA, June 1988.

47. Crystallographic Analysis of T7 RNA Polymerase. Y. J. Chung, R. Sousa, J. P. Rose, E. Lafer and B. C. Wang, Abstr. P1, 46th Annual Pittsburgh Diffraction Conference, Pittsburgh, PA, November 1988.
48. The Structure of T7 RNA Polymerase at 4Å Resolution. Y. J. Chung, R. Sousa, J. P. Rose, E. Lafer and B. C. Wang, Abstr. PB27, American Crystallographic Association Annual Meeting, Seattle, WA, July 1989.
49. Crystal Structure of a Bowman-Birk Type Proteinase Inhibitor, PI-II Refined at 2.5Å Resolution. P. Chen, J. P. Rose, R. Love, C. H. Wei and B. C. Wang, Abstr. PB28, American Crystallographic Association Annual Meeting, Seattle, WA, July 1989.
50. The Refined Crystal Structure of Ricin-OR at 3.0Å Resolution. L. Chen, W. R. Chang, J. P. Rose, C. H. Wei and B. C. Wang, Abstr. PB29, American Crystallographic Association Annual Meeting, Seattle, WA, July 1989.
51. The Use of Single-Wavelength Anomalous Scattering Data in the Structure Determination of a Neurophysin-Dipeptide Complex From an Incorporated Iodine Atom. L. Chen, J. P. Rose, E. Breslow and B. C. Wang, Abstr. P7, 47th Annual Pittsburgh Diffraction Conference, Pittsburgh, PA, November 1989.
52. Preliminary Crystallographic Studies on an Aldehyde Dehydrogenase. J. P. Rose, I. Kuo, R. Lindahl, J. Hempel and B. C. Wang, Abstr. P8, 47th Annual Pittsburgh Diffraction Conference, Pittsburgh, PA, November 1989.
53. Three-dimensional Structure of Bacteriophage T7 RNA Polymerase at 4Å Resolution. Y. J. Chung, R. Sousa, J. P. Rose, E. Lafer and B. C. Wang, Abstr. P9, 47th Annual Pittsburgh Diffraction Conference, Pittsburgh, PA, November 1989.
54. The Use of Single-Wavelength Anomalous Scattering Data in the Structure Determination of a Neurophysin-Dipeptide Complex From an Incorporated Iodine Atom. B. C. Wang, L. Chen, E. Breslow and J. P. Rose, Abstr. C06, American Crystallographic Association Annual Meeting, New Orleans, LA, April 1990.
55. Preliminary Crystallographic Studies on an Aldehyde Dehydrogenase. J. Hempel, J. P. Rose, I. Kuo, R. Lindahl and B. C. Wang, Abstr. PA27, American Crystallographic Association Annual Meeting, New Orleans, LA, April 1990.
56. Collecting Useful Single-Wavelength Anomalous Scattering Data on a Siemens X100 Area Detector. J. P. Rose and B. C. Wang, Abstr. PB32, American Crystallographic Association Annual Meeting, New Orleans, LA, April 1990.
57. Three-Dimensional Structure of Bovine Neurophysin II-Dipeptide Complex at 2.8Å Resolution. L. Chen, J. P. Rose, E. Breslow, C. S. Yoo, M. Sax and B. C. Wang, Abstr. PG08, American Crystallographic Association Annual Meeting, New Orleans, LA, April 1990.
58. Resolution of Phase Ambiguity in Macromolecular Crystallography by a Noise Filtering Process. B. C. Wang, Abstracts (p. 12) of Converging Approaches in Computational Biology, Albany Conference, Albany, NY, September 1990.
59. Structure of T7 RNA Polymerase at 4Å. R. Sousa, Y. J. Chung, J. P. Rose, E. Lafer and B. C. Wang, Abstr. PA18, American Crystallographic Association Annual Meeting, Toledo, OH, July 1991.
60. Single Crystals of a Chimeric T7/T3 RNA Polymerase With T3 Promoter Specificity. E. M. Lafer, Y. J. Chung, B. C. Wang and R. Sousa, Abstr. PA19, American Crystallographic Association Annual Meeting, Toledo, OH, July 1991.
61. Crystals of Glutathione S-Transferase. J. H. Fu, K. Zeng, J. P. Rose, M. F. Tam, C. P. D. Tu and B. C. Wang, Abstr. PA27, American Crystallographic Association Annual Meeting, Toledo, OH, July 1991.
62. Preliminary Crystallographic Analysis of Cardiotoxin V with Major Fusion Activity From Taiwan Cobra (*Naja naja atra*) Venom. C. J. Chen, J. P. Rose, C. D. Hsiao, T. J. Lee, W. G. Wu and B. C. Wang, Abstr. PA46, American Crystallographic Association Annual Meeting, Toledo, OH, July 1991.
63. Molecular Replacement Analysis of the Neurophysin-Oxytocin Complex. J. P. Rose and B. C. Wang, Abstr. PG33, American Crystallographic Association Annual Meeting, Toledo, OH, July 1991.
64. Crystals of a Bovine Neurophysin II-Tripeptide Complex. E. Benatan, J. P. Rose and B. C. Wang, Abstr. PG34, American Crystallographic Association Annual Meeting, Toledo, OH, July 1991.
65. Molecular Replacement Analysis of a Cardiotoxin V with Major Fusion Activity From Taiwan Cobra (*Naja naja atra*) Venom. J. P. Rose, C. D. Hsiao, Y. J. Sun, W. G. Wu and B. C. Wang, Abstr. P-40, 49th Pittsburgh Diffraction Conference, Columbus, OH, November 1991.

66. Preliminary Structure of the Neurophysin-Oxytocin Complex. J. P. Rose and B. C. Wang, Abstr. P-41, 49th Pittsburgh Diffraction Conference, Columbus, OH, November 1991.
67. Structure of T7 RNA Polymerase. B. C. Wang, R. Sousa, Y. J. Chung, J. P. Rose and E. Lafer, Abstr. R004, Keystone Symposium on Fundamental Mechanism of Transcription, Copper Mt., CO, April 1992.
68. Comparison of the Alpha-Carbon Trace of Bacteriophage T7 RNA Polymerase and the Klenow Fragment of DNA Polymerase I Reveals a 'Polymerase Fold'. R. Sousa, J. P. Rose, Y. J. Chung, and B. C. Wang, Abstr. BB03, American Crystallographic Association Annual Meeting and 50th Annual Pittsburgh Diffraction Conference, Pittsburgh, PA, August 1992.
69. The Octameric Histone Core of Nucleosome: Problems Encountered in the Structure Determination. B. C. Wang, J. P. Rose, G. Arents and E. N. Moudrianakis, Abstr. EE02, American Crystallographic Association Annual Meeting and 50th Annual Pittsburgh Diffraction Conference, Pittsburgh, PA, August 1992.
70. Molecular Dynamics Simulations of Hormone Carrier Protein Neurophysin With and Without Ligand. P. Arjunan, J. P. Rose and B. C. Wang, Abstr. PA39, American Crystallographic Association Annual Meeting and 50th Annual Pittsburgh Diffraction Conference, Pittsburgh, PA, August 1992.
71. X-ray Diffraction Analysis of Isoenzyme 3-3 Rat Liver Glutathione S-Transferase: New Crystal Forms. J. H. Fu, J. P. Rose, M. F. Tam, and B. C. Wang, Abstr. PA57, American Crystallographic Association Annual Meeting and 50th Annual Pittsburgh Diffraction Conference, Pittsburgh, PA, August 1992.
72. Crystallographic Analysis of Human Chimeric a Class Glutathione S-Transferase. K. Zeng, J. P. Rose, C. P. D. Tu and B. C. Wang, Abstr. PA58, American Crystallographic Association Annual Meeting and 50th Annual Pittsburgh Diffraction Conference, Pittsburgh, PA, August 1992.
73. Crystallographic Analysis of a Glutamine Binding Protein. C. D. Hsiao, Y. J. Sun, J. P. Rose, C. Ho and B. C. Wang, Abstr. PA63, American Crystallographic Association Annual Meeting and 50th Annual Pittsburgh Diffraction Conference, Pittsburgh, PA, August 1992.
74. Crystallographic Analysis of a Class 3 Aldehyde Dehydrogenase. Y. J. Sun, C. D. Hsiao, J. P. Rose, I. Kou, J. Hempel and B. C. Wang, Abstr. PA79, American Crystallographic Association Annual Meeting and 50th Annual Pittsburgh Diffraction Conference, Pittsburgh, PA, August 1992.
75. The Structure of the Neurophysin-Oxytocin Complex at 2.8Å Resolution. J. P. Rose and B. C. Wang, Abstr. PB59, American Crystallographic Association Annual Meeting and 50th Annual Pittsburgh Diffraction Conference, Pittsburgh, PA, August 1992.
76. The Nucleosomal Core Histone Octamer at 3.1Å Resolution: A Tripartite Protein Assembly and a Left-Handed Superhelix. E. N. Moudrianakis, G. Arents, R. W. Burlingame, W. E. Love and B. C. Wang, Abstr. PB74, American Crystallographic Association Annual Meeting and 50th Annual Pittsburgh Diffraction Conference, Pittsburgh, PA, August 1992.
77. Crystal Structure of a Glutamine-Binding Protein at 2.5Å Resolution. C.D. Hsiao, Y. J. Sun, J. P. Rose, P. F. Cottam, C. Ho, and B.C. Wang, Abstr. A27, The Fifth International Symposium and Workshop of the Society of Chinese Bioscientists in America, Baltimore, MD, June 1993.
78. The Refined Crystal Structure of a Neurophysin-Oxytocin Complex at 2.8Å Resolution. J. P. Rose, C. D. Hsiao and B. C. Wang, Abstr. PS-03.11.12, XVI Congress and General Assembly of the International Union of Crystallography, Beijing, China, August 1993.
79. The Refined Crystal Structure of a Neurophysin-Dipeptide Complex at 2.5Å Resolution. C. K. Wu, J. P. Rose and B. C. Wang, Abstr. PS-03.11.13, XVI Congress and General Assembly of the International Union of Crystallography, Beijing, China, August 1993.
80. The Intimate Interactions of the Love Hormone: The Crystal Structure of a Neurophysin-Oxytocin Complex. J. P. Rose, C. D. Hsiao and B. C. Wang, Abstr. P-17, 51st Annual Pittsburgh Diffraction Conference, Valley Forge, PA, November 1993.
81. The Thumb's Knuckle: Flexibility in the Thumb Subdomain of T7 RNA Polymerase is Revealed by the Structure of a Chimeric T7/T3 RNA Polymerase. R. Sousa, J. P. Rose and B. C. Wang, Abstr. PB05, Annual Meeting of the American Crystallographic Association, Atlanta, GA, June 25-July 1, 1994.
82. Crystals of Glutamine-Binding Protein in Various Conformational States. C-D. Hsiao, Y-J. Sun, J. P. Rose, P. F. Cottam, C. Ho and B. C. Wang, Abstr. PK04, Annual Meeting of the American Crystallographic Association, Atlanta, GA, June 25-July 1, 1994.

83. Structure of a Chimeric Human Alpha Glutathione S-transferase, GST121, and its Temperature Sensitive G82R mutant. K. Zeng, J. P. Rose, C. Strickland, H.-C. Chen, C.-P. D. Tu and B. C. Wang, Annual Meeting of the American Crystallographic Association, Atlanta, GA June 25-July 1, 1994.
84. Preliminary Structure of A Neurophysin Hydrin I Complex. B. Hu, J. Fu, J. Rose and B. C. Wang, Abstr. W058, Annual Meeting of the American Crystallographic Association, Montreal, Canada, July 23-28, 1995.
85. The Crystal Structure of Ligand-Free Neurophysin. C. K. Wu, J. Rose, E. Breslow and B. C. Wang, W059, Annual Meeting of the American Crystallographic Association, Montreal, Canada, July 23-28, 1995.
86. Crystal Structure of Human Liver Mu Class Glutathione S-Transferase 1A-1A. P. L. Ong, K. Zeng, J. Rose, C. P. D. Tu and B. C. Wang, W091, Annual Meeting of the American Crystallographic Association, Montreal, Canada, July 23-28, 1995.
87. An analysis of Data Collection Strategies and Data Reduction Software for Image Plate Data. B. Hu, J. Rose and B.C. Wang, Abstr. PS-01.04.12, XVII Congress and General Assembly of the International Union of Crystallography, Seattle, WA, August 8-17, 1996.
88. The Crystal Structure of Class 3 Aldehyde Dehydrogenase and Implications to the Class 1 and 2 Enzymes. Z.-J. Liu, J. Sun, J. Rose, D. Hsiao, W.-R. Chang, Y.-J. Chung, I. Kuo, J. Hempel, R. Lindahl and B. C. Wang, Abstr. PS-04.01.18, XVII Congress and General Assembly of the International Union of Crystallography, Seattle, WA, August 8-17, 1996.
89. The Structure of the Detoxification Enzyme: Glutathione S-Transferase D21 From *Drosophila Melanogaster*. P-1, Ong, J. P. Rose, C.-P. D. Tu and B.C. Wang, Abstr. PS-04.01.64, XVII Congress and General Assembly of the International Union of Crystallography, Seattle, WA, August 8-17, 1996.
90. Crystals of the Augmenter of Liver Regeneration. C.-K. Wu, J. P. Rose, A. Francavilla, J. G. Prelich, A. Iacobellis, M. Hagiya, A. Rao, T. Starzl and B.C. Wang, Abstr. PS-04.07.22, XVII Congress and General Assembly of the International Union of Crystallography, Seattle, WA, August 8-17, 1996.
91. Molecular Aggregation of the Neurophysins. J. P. Rose and B. C. Wang, Abstr. PS-04.08.11, XVII Congress and General Assembly of the International Union of Crystallography, Seattle, WA, August 8-17, 1996.
92. How Does Solvent Flattening Remove the Phase Ambiguity. B. C. Wang, Abstr. MS-03.03.06, XVII Congress and General Assembly of the International Union of Crystallography, Seattle, WA, August 8-17, 1996.
93. Novel NAD-binding in aldehyde dehydrogenase - a new twist on an old theme. Z.-J. Liu, J. Rose, J. Hempel, R. Lindahl and B.-C. Wang. P86, Annual Meeting of the American Crystallographic Association, St. Louis, Missouri, July 19-25, 1997.
94. X-ray Crystallographic Studies on the Nucleoside Diphosphate Kinase from *Bacillus halodenitrificans*. C.-J. Chen, J. P. Rose, M.-Y. Liu, W. J. Payne, J. LeGall, W.-C. Chang and B.-C. Wang. P96, Annual Meeting of the American Crystallographic Association, St. Louis, Missouri, July 19-25, 1997.
95. Structure of Bacteriophage T7 RNA Polymerase at 2.6 Å Resolution and A New Low-Salt Crystal Form. B.-C. Wang, Z.-J. Liu, C.-J. Chen, Chandrasekhar, W.-R. Chang, T.-G. Huang, Z.-L. Wan, M.-Y. Liu, R. Sousa, and J. P. Rose. P108, Annual Meeting of the American Crystallographic Association, St. Louis, Missouri, July 19-25 (1997).
96. Structure of des 1-6 neurophysin-vasopressin complex. B. Hu, J. Rose and B.-C. Wang. P120, Annual Meeting of the American Crystallographic Association, St. Louis, Missouri, July 19-25, 1997.
97. Experiences with the SMART 2K CCD System for Macromolecular Crystallography Using a Rotating Anode X-ray Source. P121, Annual Meeting of the American Crystallographic Association, St. Louis, Missouri, July 19-25, 1997.
98. Refined Crystal Structure of Bacteriophage T7 RNA Polymerase. Zhi-Jie Liu, John P. Rose, Bi-Cheng Wang, 11.02.01, Annual Meeting of the American Crystallographic Association, Arlington, Virginia, July 18-23, 1998.
99. Structural Characterization of the Augmenter of Liver Regeneration. Chia-Kuei Wu, Tamara A. Dailey, Harry A. Dailey, Bi-Cheng Wang and John P. Rose, P208, Annual Meeting of the American Crystallographic Association, Arlington, Virginia, July 18-23, 1998.
100. The Crystal Structure of Ligand-Free and Ligand Bound Glutamine-Binding Proteins. Yuh-Ju Sun, John Rose, Bi-Cheng Wang, and Chwan-Deng Hsiao. Annual Meeting of the American Crystallographic Association, Arlington, Virginia, July 18-23, 1998.

101. The Crystal Structure of the Augmenter of Liver Regeneration Reveals a Novel FAD Binding Motif. John P. Rose, Chia Kuei Wu, Tamara A. Dailey, Harry A. Dailey and Bi-Cheng Wang, 1999 University System of Georgia Research Symposium, March 1999.
102. Crystallization and Preliminary Crystallographic Studies of a Phosphoenolpyruvate (PEP) Synthetase from *Pyrococcus Furiosus*. Zhi-Jie Liu, Andrea M. Hutchins, M. Gary Newton, John P. Rose, Michael W. Adams, and Bi-Cheng Wang, 1999 University System of Georgia Research Symposium, March 1999.
103. Structures of a New Crystal Form of T7 RNA Polymerase and its Transcription Bubble Complex. Chun-Jung Chen, Florian Schubot, Zhi-Jie Liu, John P. Rose and Bi-Cheng Wang, 1999 University System of Georgia Research Symposium, March 1999.
104. Preliminary X-ray Crystallographic Studies of the Mitochondrial Transcription Factor MTF1p from *Saccharomyces cerevisiae*. Florian Schubot, Chun-Jung Chen, John P. Rose, Bi-Cheng Wang, 1999 University System of Georgia Research Symposium, March 1999.
105. Towards the Structure Determination of Glycerol Dehydrogenase from *Thermotoga maritima*. Vasundara Srinivasan, Kesen Ma, John P. Rose, Michael W.W. Adams and Bi-Cheng Wang, 1999 University System of Georgia Research Symposium, March 1999.
106. State-of-the-art In-house Data Collection Enables Human Ferrochelatase Structure Determination by Fe-SAD. Chia-Kuei Wu, Amy Burden, John P. Rose, Joe Ferrara, Harry A. Dailey, and Bi-Cheng Wang, Abstr. PT12, American Crystallographic Association Annual Meeting, Buffalo, New York, May 1999.
107. Experiences in Teaching New Techniques to the Crystallographic Community. Bi-Cheng Wang, Abstr. M12.FF.001. XVIIIth International Congress of Crystallography, Glasgow, Scotland, August 1999.
108. Preliminary Results of T7 RNA Polymerase DNA Complex. C.-J. Chen, F. Schubot, Z.-J. Liu, J. P. Rose, and B.-C. Wang, Abstr. P07.04.049, XVIIIth International Congress of Crystallography, Glasgow, Scotland, August 1999.
109. Preliminary Crystallographic Studies of The Yeast Mitochondrial Transcription Factor, mTF1P. F. D. Schubot, C.-J. Chen, J.P. Rose, and B.-C. Wang, Abstr. P07.04.050, XVIIIth International Congress of Crystallography, Glasgow, Scotland, August 1999).
110. Preliminary Crystallographic Studies of a Phosphoenolpyruvate (PEP) synthetase from *Pyrococcus furiosus*. Zhi-Jie Liu, Andrea M. Hutchins, M. Gary Newton, John P. Rose, Michael W. Adams, Bi-Cheng Wang, Abstr. P11.04.040, XVIIIth International Congress of Crystallography, Glasgow, Scotland, August 1999.
111. The Refined Crystal Structure of the Augmenter of Liver Regeneration. John P. Rose, Chia-Kuei Wu, Tamara A. Dailey, Harry A. Dailey, and Bi-Cheng Wang, Abstr. P06.04.082, XVIIIth International Congress of Crystallography, Glasgow, Scotland, August 1999.
112. Towards the Crystal Structure Determination of Glycerol Dehydrogenase from *Thermotoga maritima*. Vasundara Srinivasan, Kesen Ma, J. P. Rose, Michael W. W. Adams and B.-C. Wang, Abstr. P11.04.084, XVIIIth International Congress of Crystallography, Glasgow, Scotland, August 1999.
113. Direct Determination of Crystal Structure of Human Ferrochelatase Using [2Fe-2S] Anomalous Scattering Signal from In-house Data and Solvent Flattering. Chia-Kuei Wu, Amy Burden, John P. Rose, Joe Ferrara, Harry A. Dailey, and Bi-Cheng Wang, Abstr. P12.02.023, XVIIIth International Congress of Crystallography, Glasgow, Scotland, August 1999.
114. Resolution of Phase Ambiguity by Solvent Flattering and Its Application to Protein Structure Determination Using Single Wavelength Anomalous Scattering Data. Bi-Cheng Wang, Abstr. B8, 57th Pittsburgh Diffraction Conference, Columbus, OH, October 1999.
115. "Recent Results Using Sulfur, Selenium, and Iron Single Wavelength Anomalous Scattering Data in Protein Structure Determination," Mid Atlantic Protein Workshop, Harpers Ferry, WV, May 2000.
116. "Low Resolution Sulfur "Super Atom" SAS Phasing of Macromolecules Containing Disulfide Bonds", Mid Atlantic Protein Workshop, Harpers Ferry, WV, May 2000.
117. Sulfur SAS Phasing at 3Å Resolution for the Direct Determination of the Photo-Protein Obelin Structure, Advanced Photon Source Users meeting, Argonne National Laboratory, June 2000.
118. Low Resolution Sulfur "Super Atom" SAS Phasing of Macromolecules Containing Disulfide Bonds. Advanced Photon Source Users meeting, Argonne National Laboratory, June 2002.

119. The 1.4Å Crystal Structure of Hyperthermophilic Glycerol Dehydrogenase from *Thermotoga maritima*. ACA Annual Meeting, St. Paul, Minnesota, July 2000.
120. Crystal Structure of the Calcium-Regulated Photoprotein Obelin Solved at 1.1Å Resolution: Implications for the Mechanism of Bioluminescence. ACA Annual Meeting, St. Paul Minnesota, July 2000.
121. The 1.75Å Crystal Structure of the Augmenter of Liver Regeneration Reveals a New Mode of FAD Binding. ACA Annual Meeting, St. Paul, Minnesota, July 2000.
122. The 2.0Å Structure of Human Ferrochelatase, the Terminal Enzyme of Heme Biosynthesis. ACA Annual Meeting, St. Paul, Minnesota, July 2000.
123. Low Resolution Sulfur “Super Atom” SAS Phasing of Macromolecules Containing Disulfide Bonds. ACA Annual Meeting, St. Paul, Minnesota, July 2000.
124. Sulfur SAS Phasing at 3Å Resolution for the Direct Determination of the Photo-Protein Obelin Structure. ACA Annual Meeting, St. Paul, Minnesota, July 2000.
125. Automated Data Collection. Data Collection Workshop, European Synchrotron Research Facility, Grenoble, France. February 20, 2001.
126. Methodology and Technology Development for Structural Genomics. Annual Meeting of the Canadian Society of Microbiology, Waterloo, Canada, June 13, 2001.
127. The Crystal Structure of Obelin from *Obelia geniculata* at 1.82 Å Resolution. PP032, ACA Meeting, Los Angeles, CA, July 21-26, 2001.
128. Refined Crystal Structure of the Ca²⁺-regulated Photoprotein Obelin at 1.1 Å Resolution. P066, ACA Meeting, Los Angeles, CA. July 21-26, 2001.
129. Direct Crystallography and the Southeast Collaboratory for Structural Genomics, Keystone Symposium, Breckenridge, CO, January 7, 2002.
130. Southeast Collaboratory for Structural Genomics: Methodology and Technology Development. University of Alabama in Huntsville, Huntsville, Alabama, February 15, 2002.
131. Computational Methods to Extract Phase Information from Single Wavelength Data: Theory and Practice. ACA Meeting, San Antonio, Texas, May 26, 2002.
132. Direct Crystallography and the Southeast Collaboratory for Structural Genomics. Second Tsinghua International Conference of Protein Sciences, Tsinghua University, Beijing, China, June 4, 2002.
133. The Iterative Single-wavelength Anomalous Scattering method for Phasing Macromolecular Structures. The ISAS Workshop, Tsinghua University, Beijing, China, June 6, 2002.
134. Methodology and Technology Development for Structural Genomics At the Southeast Collaboratory for Structural Genomics. Shanghai University, Shanghai, China, June 14, 2002.
135. Automation in Protein Crystallography Data Collection - An Overview. 2002 Gordon Research Conference on Diffraction Methods in Structural Biology, New London, Connecticut, July 15, 2002.
136. Direct Crystallography: Phasing from Native Crystals. 2002 Gordon Research Conference on Diffraction Methods in Structural Biology, New London, Connecticut, July 15, 2002.
137. Sulfur Phasing and Direct Crystallography. International Union of Crystallography Conference, Geneva, Switzerland, August 5, 2002.
138. Meeting the Challenges of High-throughput Structure Determination for Structural Genomics. Pittsburgh Diffraction Conference, Pittsburgh, PA, October 5, 2002.
139. Progress Towards Direct Macromolecular Crystallography. Workshop on Automated Structure Determination, International Structural Genomics Organization meeting, Berlin, Germany, October 8, 2002.
140. The Southeast Collaboratory for Structural Genomics. NIH Joint meeting of PSI Research Center PIs and the PSI Advisory Committee, NIGMS/NIH Bethesda, MD, November 14, 2002.
141. Meeting the Challenges of High-throughput Structure Determination for Structural Genomics. National Cancer Institute, Frederick, MD, November 15, 2002.
142. Structural Genomics and Direct Crystallography. Bi-Cheng Wang, Biotech Symposium 2003 In Honor of Dr. Ahmed Abdelal, Atlanta, GA, June 16, 2003.
143. Is Redundancy the Key? A Study on ISAS. Peter S. Horanyi, Zhi-Jie Liu, Lu Deng. Biotech Symposium 2003.

144. Automated Imaging System: A Valuable tool for HT Protein Crystallography. Shu-Huey Chang, Ashit Shah, Jessie Chang, Wolfram Tempel, Zhi-Jie Liu, John Rose and Bi-Cheng Wang, Biotech Symposium 2003.
145. Practical Aspect of Sulfur SAS Phasing with Soft X-Rays: Monitoring the Readiness of a Facility using Zn-free Insulin Crystals. Lirong Chen, Zhi-Jie Liu, John Rose, Doowon Lee, Hua Yang, M. Gary Newton, John Chrzas, Gerold Rosenbaum and Bi-Cheng Wang, Biotech Symposium 2003.
146. Atomic Resolution Structures of Photoprotein Obelin Bound with Different Substrates: New Aspects about Function. Lu Deng, Eugene Vysotski, Zhi-Jie Liu, Bruce R. Branchinid, John Lee, John Rose, and Bi-Cheng Wang, Biotech Symposium 2003.
147. Using Centric and Symmetry-related Reflections to Evaluate Anomalous Scattering Signal/Noise Ratio. Zheng-Qing Fu, John P. Rose, Biotech Symposium 2003, Bi-Cheng Wang.
148. Improved Crystallization and Diffraction of Pfu-35386: From Twinned to un-Twinned Crystals. Jeff Habel, Ashit Shah, Zhi-Jie Liu, John Rose, Bi-Cheng Wang, Biotech Symposium 2003.
149. High Throughput X-ray Crystal Screening Using an Intelligent Automated Sample Changer (The Rigaku/MSR ACTOR/ DIRECTOR System). Doowon Lee, John P. Rose, Zhi-Jie Liu and Bi-Cheng Wang, Biotech Symposium 2003.
150. Intergenic distance distribution is surprisingly conserved across microbial genomes. D. Lin, J. Praissman, F. Poole, F. Jenney, J. Rose, M. W. W. Adams, B.C. Wang, Biotech Symposium 2003.
151. Crystal Structure Determination Using In-House Chromium X-Ray Source. Zhi-Jie Liu, John Rose, Wolfram Tempel, Ashit Shah, Doowan Lee, Jeff Habel, Gary Newton, Chwan-Deng Hsiao and Bi-Cheng Wang, Biotech Symposium 2003.
152. The Strange Case of Pf-65527. M. Gary Newton, John P. Rose, Lu Deng, Zhi-Jie Liu, Florian Schubot, Wolfram Tempel and Bi-Cheng Wang, Biotech Symposium 2003.
153. OF PROTEIN CRYSTALLOGRAPHY DATA. James C. Phillips, John P. Rose, Bi-Cheng Wang et al, Biotech Symposium 2003.
154. Adapting Bioinformatics Workflow Software to Crystallographic Structure Determination. Jeremy Praissman, Dawei Lin, Zhi-Jie (James) Liu, Wolfram Tempel, John Rose and Bi-Cheng Wang, Biotech Symposium 2003.
155. Experiences With Commercial Robots for High Throughput Crystallization Effort for Structural Genomics. Ashit Shah, Shu-Huey Chang, Doowon Lee, Wolfram Tempel, Zhi-Jie Liu, John P. Rose and Bi-Cheng Wang, Biotech Symposium 2003.
156. Structural Basis for Substrate Specificity Among Class I α 1,2-Mannosidases. Wolfram Tempel, Khanita Karaveg, Zhi-Jie Liu, John P. Rose, Kelley W. Moremen and Bi-Cheng Wang, Biotech Symposium 2003.
157. XtalDB - A Crystal Information Management System. Hua Zhang, Wolfram Tempel, Zhi-Jie Liu, Dawei Lin, John Rose and Bi-Cheng Wang, Biotech Symposium 2003.
158. Crystal Salvaging Efforts at SECSG, A.K. Shah, Z.-J. Liu, W. Tempel, J. Chang, S. Chang, Jeff Habel, P. Horanyi, H. Yang, L. Huang, G. Newton, J. Rose and B.C. Wang, Keystone Symposium, Keystone. CO, April 2004.
159. A flexible Web Interface Tool for Integrating Software for High Throughput Bioinformatics, Crystallography and Other Application. D. Lin, J. Praissman, Z.-J. Liu, H. Zhang, W. Tempel, J. Rose and B.C. Wang Keystone Symposium, Keystone. CO, April 2004.
160. The SECSG Protein-to-Structure Pipeline for High-throughput and High-Quality Structural Results. J.P. Rose, Z.-J. Liu, D. Lin, W. Tempel, L. Chen, A. Shah, J. Richardson, D. Richardson, G. Newton and B.C. Wang, Keystone Symposium, Keystone. CO, April 2004.
161. The SER-CAT User's "Remote Participation" Program: Status and Plans. B.C. Wang, J. Chrzas, G. Rosenbaum, J. Unik, Z. Jin, J. Fait, V. Babson and J. P. Rose, Advanced Photon Source Users Meeting, Argonne National Laboratory, Argonne, IL, 2004.
162. SGXPro: A User friendly Computational Environment for Rapid Crystal Structure Determination. Z.-Q. Fu, A. Howard, J.P. Rose and B.C. Wang, Advanced Photon Source Users Meeting, Argonne National Laboratory, Argonne, IL, 2004.
163. Rasv and Ras Indices for Evaluating the Anomalous Scattering Signal to Noise Level. Zheng-Qing Fu, John P. Rose, B.C. Wang. American Crystallographic Association (ACA) Meeting, Chicago, July, 25-31, 2004.
164. Crystal Salvaging Efforts at SECSG. Jeff Habel, A.K. Shah, Z.-J. Liu, W. Tempel, J. Chang, S. Chang, P. Horanyi,

- H. Yang, L. Huang, G. Newton, J. Rose and B.C. Wang, ACA Meeting, Chicago, July, 25-31, 2004
165. High-Throughput Methods for Gene Expression and Purification of Hyperthermophilic *Pyrococcus furiosus* Proteins., L-L Kelley, B. Dillard, C. Shah, F. Sugar, H.-S Lee, F. Poole, F. E. Jenney, Jr, M.W.W. Adams and B.C. Wang, ACA Meeting, Chicago, July, 25-31, 2004.
166. A Protein Family View of 3D Protein Structure Space Coverage. Dawei Lin, Yuchao Zhou, Jeremy Praissman, John Rose and B.C. Wang, ACA Meeting, Chicago, July, 25-31, 2004.
167. A Multi-Data-Set Data Collection Strategy Using Dose Derived Exposures for Optimum Data Acquisition. Z.J (James) Liu, L.R. Chen, G. Rosenbaum, J. Chrzas, Z.-Q Fu, J. Rose, and B.C. Wang, ACA Meeting, Chicago, July, 25-31, 2004.
168. Structural Investigation of a Non-natural Dinucleotide with anti-HIV Integrase Activity, M.G. Newton, Charles F. Campana, G. Ch, D. Lee, Z-J Liu, V. Nail, J. Phillips, J.P. Rose, B.C. Wang, ACA Meeting, Chicago, July, 25-31, 2004.
169. The SECSG Protein-to-Structure Pipeline: Protein and Limitations. J.P. Rose, Z.-J. Liu, D. Lin, W. Tempel, L. Chen, A. Shah, J. Richardson, D. Richardson, G. Newton and B.C. Wang, ACA Meeting, Chicago, July, 25-31, 2004.
170. Protein Model Validation in Structural Genomics - the SECSG Perspective. W. Tempel, Z.J. Liu, W.B Arendall III, S. Wang, D.C. Richardson, J.S. Richardson, J. Rose, B.C. Wang, ACA Meeting, Chicago, July, 25-31, 2004.
171. SGXPRO: A Versatile Structure Solving Engine for Structural Biology/Genomics. Bi-Cheng Wang, Qing (Albert) Fu, Yunzhou Wu, Dongsheng Che, Jizhen Zhao, Haijin Yan, Zheng, John P. Rose, ACA Meeting, Chicago, July, 25-31, 2004.
172. Technology Development at SECSG Applicable to High-Throughput Structural Genomics. B.C. Wang, International Conference on Structural Genomics, Washington D.C., Nov. 19, 2004.
173. A Multi-Data-Set Strategy for Increasing the Signal-to-Noise Ratio in Diffraction Data. Z.J (James) Liu, L.R. Chen, WH Zhou, Z.-Q Fu, G. Rosenbaum, J. Chrzas, J. Rose, and B.C. Wang. 2004 International Conference on Structural Genomics, Washington D.C., Nov. 19, 2004.
174. The SECSG Protein-to-Structure Pipeline: Potential and Limitation. J. Rose, Z.-J. Liu, D. Lin, W. Tempel, L. Chen, A. Shah, J. Richardson, D. Richardson, G. Newton, J. Ng, and B.C. Wang, International Conference on Structural Genomics, Washington D.C., Nov. 19, 2004.
175. Experimental Errors Correction by 3D Models to Enhance the Anomalous Signal/Noise Ratio. Z.-Q. Fu, J.P. Rose and B.C. Wang, International Conference on Structural Genomics, Washington D.C., Nov. 19, 2004.
176. SGXPRO: A Software Suite with a Parallel Workflow Engine for the Automation of Structure Solving Process. Z.Q. Fu, J.P. Rose and B.C. Wang, International Conference on Structural Genomics, Washington D.C., Nov. 19, 2004.
177. A Pfam-Based Management System for Structural Genomics Target Selection and Progress Monitoring. D. Lin, X. Chen, Y. Zhou, J. Praissman, S. Chellapilla, J. Rose and B.C. Wang, International Conference on Structural Genomics, Washington D.C., Nov. 19, 2004.
178. High-Throughput, High-Quality, Cost-Effective Structure Determination Using Both In-House and Synchrotron X-rays, B.C. Wang, Protein Crystallography in Drug Discovery, South San Francisco, Jan. 18, 2005.
179. From Adolescence to Maturity at SECSG: What, Why and Where We Stand in Technology Development. B.C. Wang, Protein Purification and Crystallization Workshop (PPCW) 2005, NIH, Feb. 2-3, 2005.
180. SECSGDB: A Tool for Data Management, Process Control, PDB Deposition and Publication at SECSG. J.P. Rose, A. Gingle, V. Babson, D. Lin and B.C. Wang. PPCW2005, NIH, Feb. 2-3, 2005.
181. Sfam: A Protein Family Based Tool for Reporting Structural Genomics Progress. D. Lin, X. Chen, Y. Zhou, J. Praissman, S. Chellapilla, W. Tempel, Z.J. Liu, J. Rose, B.C. Wang. PPCW2005, NIH, Feb. 2-3, 2005.
182. XtomxDB: A Flexible Protein Production Information Collection System for Structural Genomics. H. Zhang, D. Lin, I. Kataeva, P. Horanyi, J. Chang, W. Tempel, Z.J. Liu, J.P. Rose, B.C. Wang. PPCW2005, NIH, Feb. 2-3, 2005.
183. SECSG Crystallomics: A Test Bed for the Application of SECSG Technologies in Meeting the Production/Cost Requirements of PSI-2. Z.J. Liu, I. Kataeva, H. Xu, P. Horanyi, J. Habel, H. Yang, J. Chang, S.H. Chang, M.

- Zhao, L.R. Chen, W.H. Zhou D. Lee, D. Lin, W. Tempel, L. Ljungdahl, Joe Ng, M. Luo, C.H. Luan J. Zhou, J. Rose, and B.C. Wang. PPCW2005, NIH, Feb. 2-3, 2005.
184. Improving Protein Solubility: Our Experience of Using MBP Fusion and Expression at Different Temperature. I. Kataeva, J. Chang, Z.J. Liu, D. Lin, P. Horanyi, L.G. Ljungdahl, J. Rose, and B.C. Wang. PPCW2005, NIH, Feb. 2-3, 2005.
185. High Throughput Production of Clostridium Thermocellum Proteins for Structural Genomic Study. H. Xu, J. Chang, M. Zho, H. Yang, I Kataeva, P. Horanyi, D. Lin, Z.J. Liu, J.P. Rose and B.C. Wang. PPCW2005, NIH, Feb. 2-3, 2005.
186. Parallel Gene Expression and Target Salvaging at Gene Level. P.S. Horanyi, Q.J.T. Florence, J. Griffith, F.E. Jenney, Jr. Z.J. Liu, B.C. Wang. PPCW2005, NIH, Feb. 2-3, 2005.
187. Experiences with the SECSG High Throughput Crystallization Pipeline and The Need for Alternative Target Salvaging Pathways. W. Zhou, J. Habel, J. Nguyen, S.H. Chang, L. Kelley, L. Chen, D. Lee, Z.J. Liu, J.P. Rose, and B.C. Wang. PPCW2005, NIH, Feb. 2-3, 2005.
188. High-throughput protein crystallization by capillary counter-diffusion using a 96 well format automated loading device at SECSG. J. Ng, Z.J. Liu, T. Lewis, M. Harrington, L. DeLucas and B.C. Wang. PPCW2005, NIH, Feb. 2-3, 2005.
189. SAS Phasing Using Home Source and Synchrotron X-rays: An Optimal Combination for Cost-Effective High-Throughput Structure Determination. L. Chen, Z.J. Liu, D. Lee, W. Zhou, W. Tempel, J.P. Rose, and B.C. Wang. PPCW2005, NIH, Feb. 2-3, 2005.
190. SGXPro: Automating and Optimizing Program Performance for Crystal Structure Determination, Including Signal-based Data Collection. Z.-Q Fu, J. Rose, B.C. Wang. PPCW2005, NIH, Feb. 2-3, 2005.
191. Higher-Quality Structures Assured at SECSG. W. Tempel, Z.J. Liu, L. Chen, W. Zhou, W.B Arendall III, S. Wang, D.C. Richardson, J.S. Richardson, J. Rose, B.C. Wang. PPCW2005, NIH, Feb. 2-3, 2005.
192. Parallel Workflow Engine to Optimize the Program and Parameter Space Searching for Protein Structure Determination. Zheng-Qing Fu, John Rose, B.C. Wang, ACA2005.
193. Five Structures in 23 Hours at SER-CAT Determined by SAS and an Optimizing High Throughput Structure Determination Procedure. James Z.J. Liu, Lirong Chen, Weihong Zhou, Doowon Lee, Dawei Lin, Wolfram Tempel, John Rose, and B.C. Wang, ACA2005.
194. Checking on Your Mol's Probity and Healing Her Hurts, Jane S. Richardson, Ian W. Davis, W. Bryan Arendall III, Wolfram Tempel¹, Bi-Cheng Wang, & David C. Richardson, ACA2005.
195. Higher-Quality Structures Assured at SECSG, W. Tempel, Z.J. Liu, L. Chen, W. Zhou, L. Deng, W.B. Arendall III, S. Wang, D.C. Richardson, J.S. Richardson, J. Rose, B.C. Wang, ACA2005.
196. Developing a High Throughput Crystallization Pipeline for Structural Genomics Applications at the Southeast Collaboratory for Structural Genomics. J. Rose, Z.-J. Liu, J. Habel, W. Zhou, S.-H. Chang, J. Nguyen, D. Lee, L.R. Chen, W. Tempel, A. Shah and B.C. Wang, ACA2005.
197. SECSG Crystallomics: A Test Bed for the Application of SECSG Technologies in Meeting the Production/Cost Requirements of PSI-2. Z.J. Liu, I. Kataeva, H. Xu, P. Horanyi, J. Habel, H. Yang, J. Chang, S.H. Chang, M. Zhao, L.R. Chen, W. Zhou, D. Lee, D. Lin, W. Tempel, L. Ljungdahl, J. Ng, M. Luo, C.H. Luan, J. Zhou, J. Rose, and B.C. Wang, ACA2005.
198. SAS Phasing Using Home Source and Synchrotron X-rays: An Optimal Combination for Cost-Effective High-Throughput Structure Determination. L.R. Chen, Z.-J. Liu, D. Lee, W. Zhou, W. Tempel, J.P. Rose, and B.C. Wang, ACA2005.
199. Rapid Optimization of Cryoprotectant Concentration Using a Robotic Sample Mounting System. D. Lee, J. P. Rose, Z.-J. Liu, M. G. Newton and B.C. Wang, ACA2005.
200. Crystallization and Preliminary X-ray analysis of a Corrinoid Methyltransferase from *Moorella thermoacetica*. W.H. Zhou, J. Habel, A. Das, J. Chang, L.R. Chen, D. Lee, W. Tempel, Z.-J. Liu, L. Ljungdahl, J. Rose and B.C. Wang, ACA2005.
201. Light When YOU Need it: SER-CAT's Beamlines at the Advanced Photon Source. B.C. Wang, J. Chrzas, G. Rosenbaum, J. Rose, J. Fait, J. Gonczy, S. Foundling, Z. Jin, K. Morris, L. Horanyi and M. Graham, ACA2005.

202. SER-CAT: The Advanced Photon Source's Latest Protein Crystallography Facility. B.C. Wang, J. Chrzas, G. Rosenbaum, J. Fait, J. Gonczy, S. Foundling, Z. Jin, K. Morris, L. Horanyi, M. Graham, and J.P. Rose. IUCr2005, Florence, Italy, August 23-31, 2005.
203. Crystal Structure of *Pfu* 838710: a First Member of the Pfam CYTH Domain. Hua Yang, Jessie Chang, Ashit Shah, Joe Ng, Wolfram Tempel, Florian Schubot, Zhi-Jie Liu, John Rose and Bi-Cheng Wang. IUCr2005, Florence, Italy, August 23-31, 2005.
204. In-house S-SAD and Se-SAD Phasing with Cr Ka Radiation. Cheng Yang, Haifu Fan, Xiaodong Su, John Rose, Zhi-Jie Liu, B.C. Wang, Kurt Krause, James W. Fflugrath and Joseph D. Ferrara. IUCr2005, Florence, Italy, August 23-31, 2005.
205. Rescuing the Structure of Pfu-1136390-001. Z.-Q. Fu, Z.-J. Liu, D. Lee, L. Kelley, L. Chen, W. Tempel, N. Shah, P. Horanyi, H.S. Lee, J. Habel, B.D. Dillard, D. Nguyen, S.-H. Chang, H. Zhang, J. Chang, F.J. Sugar, F.L. Poole, F.E. Jenney Jr., M.W.W. Adams, J.P. Rose and B.C. Wang, SER-CAT Symposium, Georgia State University, Atlanta, GA, March 10, 2006.
206. Crystal structure of obelin after Ca²⁺-triggered bioluminescence suggests neutral coelenteramide as the primary excited state. G.A. Stepanyuk, Z.J. Liu, E.S. Vysotski, J. Lee, S.V. Markova, N.P. Malikova, B.C. Wang. SER-CAT Symposium, Georgia State University, Atlanta, GA, March 10, 2006.
207. Structure of a Hypothetical Protein Solved by Structural Genomics Infers Its Function of CoA binding. M. Zhao, J. Chang, J. Habel, H. Xu, L. Chen, D. Lee, D. Nguyen, S.H. Chang, P. Horanyi, Q. Florence, W. Tempel, W. Zhou, D. Lin, H. Zhang, J. Praissman, F.E. Jenney Jr., M.W.W. Adams, Z.J. Liu, J.P. Rose and B.C. Wang. SER-CAT Symposium, Georgia State University, Atlanta, GA, March 10, 2006.
208. Experiences with the SER-CAT Remote User Participation Program. J.P. Rose, J. Chrzas, Z. Jin, J. Fait, V. Babson and B.C. Wang. Advanced Photon Source Users meeting, Argonne National Laboratory, Argonne, IL, May 15, 2006.
209. The SER-CAT Remote User Participation Program. J.P. Rose, J. Chrzas, Z. Jin, J. Fait, V. Babson and B.C. Wang, Annual Meeting of the American Crystallographic Association, Honolulu, HI, July 22-28, 2006.
210. From Sample to Structure: Automation at SER-CAT. J. Fait, J. Chrzas, J. Gonczy, A. Howard, Z. Jin, J. Rose, B.C. Wang. Annual Meeting of the American Crystallographic Association, Honolulu, July 22-28, 2006.
211. On Understanding Solution Conditions that Maximize Protein Complex Formation. P.S. Horanyi, B. Dillard, Z.J. Liu, J.P. Rose, B.C. Wang. Annual Meeting of the American Crystallographic Association, Honolulu, July 22-28, 2006.
212. The Refined Structure of Hypothetical Protein Pf0725 from *P. furiosus* Confirms its function as a CoA Binding Protein. M. Zhao, J. Chang, J. Habel, H. Xu, L. Chen, D. Lee, D. Nguyen, S.H. Chang, P. Horanyi, Q. Florence, W. Tempel, W. Zhou, D. Lin, H. Zhang, J. Praissman, F.E. Jenney Jr., M.W.W. Adams, Z.J. Liu, J.P. Rose and B.C. Wang, Annual Meeting of the American Crystallographic Association, Honolulu, HI, July 22-28, 2006.
213. Crystal Structure of the Aerobic FMN-Dependent Azoreductase (AzoA) From *Enterococcus faecalis*. Z.-J. Liu, H. Chen, L. Chen, S.L. Hopper, C.E. Cerniglia, N. Shah, J. P. Rose, B.-C. Wang, Annual Meeting of the American Crystallographic Association, Honolulu, HI, July 22-28, 2006.
214. Crystal structure of methionyl-tRNA formyltransferase from *Clostridium thermocellum*. H. Yang, I. Kataeva, H. Xu, M. Zhao, J. Chang, Z. Liu, L. Chen, W. Tempel, D. Lee, D. Lin, J.P. Rose, B.C. Wang, Annual Meeting of the American Crystallographic Association, Honolulu, HI, July 22-28, 2006.
215. Coelenterazine-binding protein of *Renilla muelleri*: cloning and determination of three-dimensional structure. G. Stepanyuk, S.V. Markova, Z.-J. Liu, L.A. Frank, J. Lee, E.S. Vysotski, B.C. Wang. The 14th International Symposium on Bioluminescence and Chemiluminescence, San Diego, CA October 15-19, 2006.
216. Human P100 Tudor Domain Expression, Purification and Preliminary Crystallography Study, C. Cheng, M. Zhao, N. Shaw, H. Xu, Y. Da, J. Yang, O. Silvennoinen, Z. Yao, B.C. Wang, Z. Rao, Z.J. Liu, ICSG2006, Beijing, China, October 22-26, 2006.
217. Reductive Methylation of Surface Lysines Improves Protein Crystal Quality. N. Shaw, W. Tempel, L. Chen², H. Yang, M. Zhao, J. Chang, J.P. Rose, Z. Rao, B.C. Wang, Z.J. Liu, ICSG2006, Beijing, China, October 22-26, 2006.

218. Crystallization of a Protein Complex Involved in the Conversion of Succinate to Malate. S. Chen, N. Shaw, C. Cheng, H. Xu, P. Horanyi, B. Dillard, J. Rose, B.C. Wang, Z. Rao, Z.J. Liu, ICSG2006, Beijing, China, October 22-26, 2006.
219. Crystal Structure of Cth-1438, a Glucose/ribitol dehydrogenase from *Clostridium thermocellum*. Y. Li, H. X, N. Shaw, L. Chen, C. Cheng, S. Chen, J.P. Rose, W. Duax, W. Gong, Z. Rao, B.C. Wang, Z.J.Liu, ICSG2006, Beijing, China, October 22-26, 2006.
220. Multiple Strategies in High-Throughput Cloning, Expression and Production of non-Pfam Proteins for Structural Proteomics. H. Xu, M. Marshall, J. Hwang, D.S. Che, J. Chang, J.Y. Zhu, H. Yang, M. Zhao, Q. Florence, J.T. Swindell, B. Dillard, A. Ramiah, G. Stepanyuk, M. Zhang, X.J. Zhang, Y.L. Wang, Z.J. Liu, J.P. Rose and B.C. Wang. ICSG2006, Beijing, China, October 22-26, 2006.
221. Progress on Sulfur Phasing and Direct Crystallography at UGA and SER-CAT. L. Chen, Z.J. Liu, J.P. Rose, J. Ruble, J.Chrzas and B.C. Wang. ICSG2006, Beijing, China, October 22-26, 2006.
222. Application of A Parallel Expression System for Solving Protein Solubility Problems: Production of the C-terminal tail of human plasma membrane Ca²⁺-ATPase isoform 4b (hPMCA4bct) for crystallization. H. Yang, P. Horanyi, Z.J. Liu, J.P. Rose, B.C. Wang. ICSG2006, Beijing, China, October 22-26, 2006.
223. Establishing A High Throughput Pipeline for the Production of Non-Pfam Proteins. J.Z. Zhu, J. Hwang, H. Xu, Z.J. Liu, J.P. Rose, B.C. Wang. ICSG2006, Beijing, China, October 22-26, 2006.
224. Light When YOU Need it: SER-CAT's Beamlines at the Advanced Photon Source. J.P. Rose, J. Chrzas, Z. Jin, Z.-Q. Fu, J. Gonzy, J. Fait, G. Rosenbaum and B.C. Wang. The 64th Pittsburgh Diffraction Conference, Pittsburgh, PA October 26-28, 2006.
225. Automation at SER-CAT: A New Robot Implementation, James Fait¹, John Chrzas, Andy Howard, John Gonczy, Zheng-Qing (Albert) Fu, Zhongmin Jin, John Rose, and B. C. Wang. Annual Meeting of the American Crystallographic Association, Salt Lake City, UT, July, 20-26, 2007.
226. Parallelization of SHELXD to Quickly Solve Heavy-Atom Partial Structures on High-Performance Computers. Zheng-Qing Fu, John Chrzas, George M. Sheldrick, John Rose and Bi-Cheng Wang. Annual Meeting of the American Crystallographic Association, Salt Lake City, UT, July, 20-26, 2007.
227. Progress Towards Routine Soft X-ray Structure Determination at UGA and SER-CAT. John P. Rose, John Ruble John Chrzas, John Gonczy, James T. Swindell II, Lirong Chen, James Fait, Zheng-Qing (Albert) Fu, Zhongmin Jin and Bi-Cheng Wang. Annual Meeting of the American Crystallographic Association, Salt Lake City, UT, July, 20-26, 2007.
228. FedEx Crystallography the Next Generation: Combining Mail-in Crystallography Program with Remote Data Collection Capability at SER-CAT. Zhongmin Jin, John Chrzas, James Fait, John Gonczy, Zheng-Qing (Albert) Fu, John Rose, and B.C. Wang. Annual Meeting of the American Crystallographic Association, Salt Lake City, UT, July, 20-26, 2007.
229. Structure of the Hypothetical Protein PF0899 from *Pyrococcus furiosus* at 1.85 Å Resolution. M. Gary Newton, L. L. Clancy Kelley, Bret D. Dillard, Wolfram Tempel, Lirong Chen, Neil Shaw, Doowon Lee, Frank J. Sugar, Francis E. Jenney Jr, Han Seung Lee, Claudia Shah, Farris L. Poole III, Michael W. W. Adams, Jane S. Richardson, David C. Richardson, Zhi-Jie Liu, Bi-Cheng Wang and John Rose. Annual Meeting of the American Crystallographic Association, Knoxville, TN, May 31-June 5, 2008.
230. The Crystal Structure of TTHA0415, a Putative ACP Reductase from *Thermus thermophilus* at 1.9Å Resolution. J.T. Swindell II, L. Chen, A. Ebihara, A.Shinkai, S. Kuramitsu, S. Yokoyama, Z.-Q. Fu, J. Chrzas, J.P. Rose, B.C. Wang. Annual Meeting of the American Crystallographic Association, Knoxville, TN, May 31-June 5, 2008.
231. A example of Successful Sulfur SAS Phasing using Medium-Resolution Data: Crystal Structure of *Archaeoglobus fulgidus* ORF 1382. J.-Y. Zhu, Z.-Q. Fu, L. Chen, H. Xu, J. Chrzas, J. Rose, B.C. Wang. Annual Meeting of the American Crystallographic Association, Knoxville, TN, May 31-June 5, 2008.
232. A Multiple-Data-Set Data Collection Strategy for A Better Data Set Within a Fixed X-ray Dose. B.C. Wang, Z.J. Liu, L. Chen, G. Rosenbaun, J. Chrzas, Z.-Q. Fu and John Rose. Annual Meeting of the American Crystallographic Association, Knoxville, TN, May 31-June 5, 2008.
233. Structure Characterization of a Novel Redox-Sensitive Transcriptional Regular Involved in *Pyrococcus furiosus* Sulfur response. Y. Yang, G. Lipscomb, B.C. Wang, R.A. Scott. Annual Meeting of the American Crystallographic Association, Knoxville, TN, May 31-June 5, 2008.

234. Augmenter of Liver Regeneration and Probing for Interacting Protein. Q.J.T. Florence, B. Dillard, P. Horanyi, J.T. Swindell, H. Xu, B.C. Wang, J.P. Rose. Annual Meeting of the American Crystallographic Association, Knoxville, TN, May 31-June 5, 2008.
235. Signal-Based Data Collection: A Novel Approach to Automated Macromolecular Structure Determination On-site at SER-CAT. Bi-Cheng Wang, Zheng-Qing Fu, James Fait, Andrew Howard, John Chrzas, Lirong Chen, John Rose, Congress of the International Union of Crystallography, Osaka Japan, August 23-31, 2008.
236. Pushing the Envelop of Sulfur SAS Structure Determination at UGA/SER-CAT. John Rose, Lirong Chen, Zheng-Qing Fu, James Swindell II, Jinyi Zhu, John Ruble, John Chrzas, John Gonczy, James Fait, Zhongmin Jin and Bi-Cheng Wang, Congress of the International Union of Crystallography, Osaka Japan, August 23-31, 2008.
237. Applying Parallel Computing for a Faster and Better Structure Solution, Zheng-Qing Fu, John Chrzas, James Fait, Zhongmin Jin, Andrew Howard, John Gonczy, John P. Rose, Bi-Cheng Wang, Congress of the International Union of Crystallography, Osaka Japan, August 23-31, 2008.
238. 25 Years of SAS Phasing. John P. Rose and Bi-Cheng Wang, 66th Annual Pittsburgh Diffraction Conference, Pittsburgh, PA 2008.
239. Sulfur SAD Phasing at SER-CAT 22ID Beamline: a Successful Case with Data Collected at 1.9Å Wavelength. Liqing Chen, Lirong Chen, Zheng-Qing Fu, Mingdong Huang, Chuanbin Bian, Cai Yuan, Lin Lin, Bi-Cheng Wang, and Edward Meeham. The 6th Annual SER-CAT Symposium, Huntsville, Alabama, March 20, 2009.
240. Virtual Synchrtron. John Chrzas, James Fait, John Gonczy, Zhongmin Jin, Albert Fu, John Rose, and Bi-Cheng Wang. The 6th Annual SER-CAT Symposium, Huntsville, Alabama, March 20, 2009.
241. Signal-Based Data Collection: An Approach to Automated Data Collection Aimed at Increase Structure Solution Success. John Rose, John Chrzas, Zheng-Qing Fu, James Fait, John Gonczy, Zhongmin Jin, Andy Howard, and Bi-Cheng Wang. The 6th Annual SER-CAT Symposium, Huntsville, Alabama, March 20, 2009.
242. Developing a Low Cost Puck Based Crystal Loading and Shipping Systems for SER-CAT. James Tucker Swindell II, John Rose, John Gonczy, John Chrzas, and Bi-Cheng Wang. The 6th Annual SER-CAT Symposium, Huntsville, Alabama, March 20, 2009.
243. Sulfur-SAD Phasing: an historical perspective and recent progress at UGA and SER-CAT. Lirong Chen, Zheng-Qing Fu, John Chrzas, Hao Xu, Hua Zhang, John P. Rose, and B.C. Wang, Annual Meeting of the American Crystallographic Association, Toronto, Canada 2009.
244. Providing "Light When YOU Need It" *via* SER-CAT's virtual synchrotron. John Chrzas, James Fait, John Gonczy, Zhongmin Jin, Zheng-Qing. Fu, Andrew Howard, John P. Rose, and Bi-Cheng Wang, Annual Meeting of the American Crystallographic Association, Toronto, Canada 2009.
245. Signal-Based Data Collection: An approach to automated data collection aimed at increasing structure solution success. John P. Rose, John Chrzas, Zheng-Qing Fu, James Fait, John Gonczy, Zhongmin Jin, Andrew Howard and Bi-Cheng Wang, Annual Meeting of the American Crystallographic Association, Toronto, Canada 2009.
246. The MDS Strategy: Collecting Multiple Data Sets With Short Exposures Can Produce Better Data Than Traditional Long Exposures Within a Fixed X-ray Dose. B.C. Wang, Z.J. Liu, L. Chen, W. Zhou, H. Xu, H. Zhang, J.T. Swindell II, J.P. Rose, Z.-Q. Fu, J. Chrzas, G. Rosenbaum and M. Benning, 7th Annual SER-CAT Symposium, Oak Ridge National Laboratory, Oak Ridge, TN, March 19, 2010.
247. The SER-CAT / UGA Crystal Shipping Kit for Automated Data Collection. John Rose, James Tucker Swindell II, John Chrzas, John Gonczy, and Bi-Cheng Wang, Annual Meeting of the American Crystallographic Association, Chicago, IL, July 24-29, 2010.
248. B.C. Wang, Z.J. Liu, L. Chen, W. Zhou, H. Xu, H. Zhang, J.T. Swindell II, J.P. Rose, G. Rosenbaum, Z.-Q. Fu, J. Chrzas and M. Benning. Annual Meeting of the American Crystallographic Association, Chicago, IL, July 27, 2010.
249. SER-CAT Automation: Providing Users with A "Virtual Home Synchrotron". J. Chrzas, J. Fait, Z.-Q. Fu, J. Gonczy, A. Howard, Z. Jin, G. Rosenbaum, J.P. Rose and B.C. Wang. Annual Meeting of the American Crystallographic Association, Chicago, IL, July 24-29, 2010.

250. Can Proper Selection of Data Reduction Program Optimize the Anomalous Signal for a Particular Set of Diffraction Images? J. Tucker Swindell, II, John Rose and B.C. Wang. Annual Meeting of the American Crystallographic Association, Chicago, IL, July 24-29, 2010.
251. SER-CAT's mission of "Light When YOU Need It" for Member Institutions and the APS General Users. Z. Jin, J. Chrzas, J. Fait, Z.-Q. Fu, J. Gonczy, A. Howard, R. Salazar, U. Chinte, G. Rosenbaum, J.P. Rose and B.C. Wang. Annual Meeting of the American Crystallographic Association, Chicago, IL, July 24-29, 2010.
252. The MDS Approach for Data Collection. B.C. Wang, Z.J. Liu, L. Chen, W. Zhou, H. Xu, H. Zhang, J.T. Swindell II, J.P. Rose, G. Rosenbaum, Z.-Q. Fu, J. Chrzas and M. Benning. Pittsburgh Diffraction Conference, Pittsburgh, PA, October 27-29, 2010.
253. Detection of Crystal Radiation Damage Through Real Time Data Collection. Zhongmin Jin, John Chrzas, John Rose and B.C. Wang. Annual Meeting of the American Crystallographic Association, New Orleans, LA, May 28-June 2, 2011.
254. The Structure of a Hexahistidine-Tagged Form of Augmenter of Liver Regeneration Reveals a Novel [Cd₂C₁₄O₆] Cluster That Aids in Crystal Packing. M. Gary Newton, Quentin Florence, Chia-Kuei Wu, Jeffrey Habel, James Swindell II, Bi-Cheng Wang and John Rose. Annual Meeting of the American Crystallographic Association, New Orleans, LA, May 28-June 2, 2011.
255. SSAD_DB: a Database of Structures Solved by Sulfur SAD Phasing and Related Experimental Parameters. John Rose, Hua Zhang, Manfred Weiss and Bi-Cheng Wang. Annual Meeting of the American Crystallographic Association, New Orleans, LA, May 28-June 2, 2011.
256. Recent Efforts on Routine Phase Determination by S-SAD. Bi-Cheng Wang and John Rose. 2011 Congress of International Union of Crystallography, Madrid, Spain. August 24, 2011.
257. SER-CAT's Leading Role in Science and in the Development of Extended-Wavelength Crystallography in the U.S. Bi-Cheng Wang, John P. Rose, John Chrzas, Gerold Rosenbaum, Zheng-Qing (Albert) Fu, M. Gary Newton, James Fait, John Gonczy, Zhongmin Jin, Unmesh Chinte, Palani Kandavelu and Rod Salazar. Annual Meeting of the Georgia Research Alliance, Atlanta, GA, October 12, 2011.
258. A General Introduction to the Use of Softer X-rays in MX. Bi-Cheng Wang. 4th Winter School on Soft X-rays in Macromolecular Crystallography. European Synchrotron Radiation Facility, Grenoble, France, February 6-8, 2012.
259. Forward Looking Possibilities on Beamlines Having Optimized Extended Wavelength Capability. Bi-Cheng Wang, John P. Rose, Gerold Rosenbaum and John Chrzas. The 9th Annual SER-CAT Symposium. University of Kentucky, March 16, 2012.
260. Forward Looking Possibilities on Beamlines Having Optimized Extended Wavelength X-ray Capabilities. (Thoughts on New MX Applications with Synchrotron X-rays). Bi-Cheng Wang, John P. Rose, Gerold Rosenbaum and John Chrzas. Life Science R&D Workshop, APS, ANL. May 2, 2012.
261. Forward-looking Science Enabled by Optimized Extended Wavelength X-ray Sources for Macromolecular Crystallography: A General Introduction. 2012 American Crystallographic Association Annual Conference, Boston, MA, July 28-August 1, 2012.
262. Fast detector implementation plans at SER-CAT. John Chrzas, James Fait, Zheng-Qing (Albert) Fu, John Gonczy, Zhongmin Jin, John P. Rose, and Bi-Cheng Wang. 2012 American Crystallographic Association Annual Conference, Boston, MA, July 28-August 1, 2012.
263. Microdiffraction at SER-CAT: Current Status & Future Plans. John P. Rose, John Chrzas, James Fait, Zheng-Qing "Albert" Fu, John Gonczy, Andrew Howard, Zhongmin Jin, Gerold Rosenbaum and Bi-Cheng Wang. 2012 American Crystallographic Association Annual Conference, Boston, MA, July 28-August 1, 2012.
264. Monitoring The Oxidation States of Metals/Ions in Crystals. Palani Kandavelu, Hua Zhang, Zheng-Qing (Albert) Fu, Lirong Chen, John Chrzas, John P. Rose, and Bi-Cheng Wang. 2012 American Crystallographic Association Annual Conference, Boston, MA, July 28-August 1, 2012.
265. Enhancement of Anomalous Signal by Multiple-Dataset (MDS) Strategy and Implications to Dose Reduction in Data Collection. Unmesh Chinte, Zheng-Qing (Albert) Fu, Hua Zhang, Lirong Chen, John Chrzas, John Rose and Bi-Cheng Wang. 2012 American Crystallographic Association Annual Conference, Boston, MA, July 28-August 1, 2012.

266. The MDS Data Collection Strategy Applied to A Single Crystal, Its Implications to Radiation Dose Reduction and Signal/Noise Enhancement for S-SAD Phasing (Single-Wavelength Phasing for Macromolecules and Methodology Development for Single Crystal X-SAD). Bi-Cheng Wang, Xi'an, China, August 24, 2012.