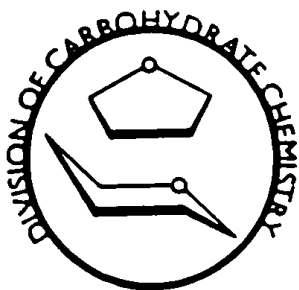


American Chemical Society
Division of Carbohydrate Chemistry

NEWSLETTER

Dr. Muthiah Manoharan
Secretary
ACS Carbohydrate Chemistry Division
Isis Pharmaceuticals Inc.
2292 Faraday Ave.
Carlsbad, CA 92008-7208 U.S.A.



Celebrating
75 Years
1924-1999

Spring 1999

**DIVISION OF CARBOHYDRATE CHEMISTRY
OFFICERS AND EXECUTIVE COMMITTEE FOR 1998-1999**

<u>Office</u>	<u>Name</u>	<u>Phone, Fax, E-mail</u>
Chairman (1998-1999)	Manssur Yalpani	508-366-4089 myalpani@aol.com
Chairman-Elect and Program Chairman (1998-1999)	Fred Brewer	718-430-2227 718-430-8922 (fax) brewer@aecom.ya.edu
Past Chairman (1998-1999)	Alfred French	504-286-4410 504-286-4217 (fax) afrench@nola.srrc.usda.gov
Executive Secretary and Program Liaison (1998-2000)	Zbigniew J. Witczak	860-742-0700 860-486-4998 (fax) zwitczak@usa.net or zwitczak@uconnvm.uconn.edu
Secretary and Newsletter Editor (1998-2000)	Mano Manoharan	760-603-2381 760-929-0036 (fax) mmanoharan@isisph.com
Treasurer (1998-2002)	Gillian Eggleston	504-286-4446 gillian@nola.srrc.usda.gov
Councilor (1997-2000)	Vacant	
Councilor (1998-2001)	Derek Horton	202-885-1750 202-885-1752 (fax)
Alternate Councilor (1997-2000)	Arland Hotchkiss	215-233-6448 215-233-6559 (fa x)
Alternate Councilor (1998-2001)	David Baker	423-974-1066 423-974-1536 (fax)
Executive Committee (members-at-large)	(98-00) Kevin Rice	313-763-1032
	(98-00) Peter Norris	908-932-9611
	(97-99) Waldemar Priebe	713-792-3777. 713- 673-9072 (fax)
	(97-99) Jacquelyn Gervay	602-621-8843



*Phosphoinositides
Chemistry, Biochemistry, and Biomedical Applications
Edited by Carol S. Brzdek
(ACS SYMPOSIUM SERIES No. 718)*

I wish to take advantage of the special divisional discount offer for the above book. I understand this book retails for \$115.00 but is available to me for \$69.00. I also understand there is a one-copy limit and that orders must include my personal check made out to Oxford University Press or my credit card number. Please include \$3.50 for shipping and handling and any applicable tax (NC tax is 6%, CA taxes vary). Order must be placed by expiration date given below.

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*Only orders submitted on this form will be accepted.
 Coupon expires 8/1/99*

ACS National Meeting, March 1999
PROGRAM FOR THE CARBOHYDRATE DIVISION
Anaheim, California, March 21-25, 1999

<u>Day/Date</u>	<u>Start Time</u>	<u>Symposium Title</u>	<u>Location</u>
Sunday 3/21	8:30AM	Recent Developments in Oligonucleotide Therapeutics	AM: Hilton San Clemente PM: Hilton Laguna A/B
	2:00PM	Advances in Carbohydrate Chemistry	Hilton San Clemente
Monday 3/22	8:55AM	Claude S. Hudson Symposium in Carbohydrate Chemistry	Hilton Laguna A/B
Tuesday 3/23	9:00AM	Advances in Carbohydrate Chemistry and Biochemistry	Hilton San Clemente
	9:00AM	Anthracycline Antibiotics: From the Bench to the Clinic	Hilton Laguna A/B
	5:00PM	Advances in Carbohydrate Chemistry (Poster Presentation)	Hilton Avila A/B
Wednesday 3/24	9:00AM	Advances in Carbohydrate Chemistry	Hilton San Clemente
	9:00AM	Anthracycline Antibiotics: From the Bench to the Clinic	Hilton Laguna A/B
Thursday 3/25	8:45AM	Advances in Oligonucleotide Chemistry	Hilton Laguna A/B

You may find more information at the following ACS website:
<http://www.asc.org/cgi-bin/ACS/personalScheduler.exe>

What's New?

The 1999 Gordon Conference on Purines, Pyrimidines, and Related Substances will take place in Newport, Rhode Island from July 4-9 1999 at Salve Regina University. **Session topics include :**

- Conformation and Topology of Nucleosides, Nucleotides, and Oligonucleotides
- Transporters of Nucleosides and Nucleobases
- New Aspects of the Anticancer Activity of Nucleosides and Nucleotides
- The Role of Enzymology in the Discovery of Biologically Active Nucleosides and Nucleotides
- Methodologies in the Synthesis of Novel Nucleosides and Nucleotides
- Recent Advances in the Discovery and Mechanism of Action of Antiviral Nucleosides
- Resistance and Mutation Associated with Nucleoside Drugs
- The Discovery and Mechanism of Action of Biologically Active Oligonucleotides
- DNA Damage and Repair
- Poster Sessions I & II

For more information or to register, please visit the following web site: <http://www.grc.uri.edu/programs/1999/purine.htm>
or contact:

Chair: Professor Vasu Nair, Department of Chemistry, University of Iowa, Iowa City, Iowa 52242, Phone: 319-335-1364/ Fax: 319-353-2621.



YOUR HELP IS CRITICAL!
We need it!

There has always been a small but very active group of individuals who have contributed to the programming of the Carbohydrate Division. If anyone has an idea for a symposium topic for future meetings, please contact any one of the officers listed in the front of this Newsletter.

1999 Newsletter Publication Deadlines



Spring 1999	March 1, 1999
Summer 1999	June 1, 1999
Fall 1999	October 1, 1999





**NEW MEMBERSHIP APPLICATION
For
The ACS Division of Carbohydrate Chemistry**

I wish to enroll as a member of the ACS Division of Carbohydrate Chemistry. I am currently a member or National Affiliate in good standing with the ACS.

Name (Dr., Mr., Mrs., Miss, Ms.) _____

Affiliation _____
(University, Institute, Company)

Street Address _____

City _____ State _____ Zip code _____

Country (if not USA) _____

Business Telephone _____ Fax _____

E-mail address: _____

ACS Membership Number _____

(found on your ACS membership card or from the mailing label on your C&E News)

You may also apply for membership On-Line at:
<http://www.ucc.uconn.edu/~wiczak/carbmem1.html>

Membership is free of charge for the first year; \$7.00 per year thereafter

Mail to: Dr. Muthiah Manoharan
Isis Pharmaceuticals
2292 Faraday Avenue
Carlsbad, CA 92008-7208

E-mail: mmanoharan@isisph.com
(760) 603-2381
Fax (760) 929-0036

Phone



**ACS National Meeting, March 1999
Hudson Symposium Reception and Banquet
Monday, March 22, 1999, 6:30 p.m.
Cattleman's Wharf Restaurant**

Please note that the C&E News announcement incorrectly indicates the *Hilton Hotel* instead of Cattleman's Wharf Restaurant. The correct location is:

**Cattleman's Wharf Restaurant
1160 W. Ball Road (corner of Walnut Street)
Anaheim, California
Phone: 714-535-1622**

DIRECTIONS FROM THE ANAHEIM CONVENTION CENTER: Go West on Katella Street. Turn North onto Walnut Street. Cross Cerritos Street, and the restaurant will be on your right-hand side next to the Conestoga Ramada Inn.

You may obtain tickets at the registration desk or by contacting Manssur Yalpani (Phone: 508-366-4089; e-mail: myalpani@aol.com) during the symposium on Monday, March 22, 1999, at the Hilton Hotel. We are expecting many to attend; so please reserve your tickets early. The cost is \$35.

**ACS National Meeting, August 1999
PROGRAM FOR THE CARBOHYDRATE DIVISION
New Orleans, Louisiana, August 22-26, 1999.**



If you are planning to submit an abstract for the New Orleans Meeting, you can do so online!

Yes, you can use graphics. Yes, you can see what it looks like before you submit it. Yes, you will get immediate confirmation.

For more information please see the following web site:

<http://www.acs.org/meetings>

[If you do not have Internet access, forms are available from the Membership Service Center at 1-800-227-5558. All forms should be mailed (NOT faxed) to the appropriate Program Chair.]

ACS National Meeting, August 1999
PROGRAM FOR THE CARBOHYDRATE DIVISION
New Orleans, Louisiana, August 22-26, 1999.

Program Chair: M. Yalpani, BTI, P.O. Box 84, Westborough, MA01581-0084, (508) 366-4089, fax (508) 898-0432, e-mail:myalpani@aol.com

Program Liaison/Executive Secretary: Z. Witczak, U of Connecticut, School of Pharmacy, 372 Fairfield Rd., Storrs, CT 06269,(860) 742-0700, fax (860) 486-4998, e-mail: witczak@uconnvm.uconn.edu or zwitczak@usa.net. Four copies of abstract (original on ACS Abstract Form) to program liaison/executive secretary by May 1, 1999.

Bioactivation of Nucleoside Analogs. P. D. Cook, Isis Pharmaceuticals, 2292 Faraday Avenue, Carlsbad, CA 92008-7208, (760) 603-2357, fax (760) 929-0036, e-mail: dcook@isisph.com.

Carbohydrate-Based Ligands Targeting Nucleic Acids. M. Manoharan, P. D. Cook, Isis Pharmaceuticals, 2292 Faraday Avenue, Carlsbad, CA 92008-7208, (760) 603-2381, fax (760) 929-0036, e-mail: mmanoharan@isisph.com.

Carbohydrate Vaccines. L. Bhattacharyya, Bioprocess and Bioanalytical Research, Merck and Company, West Point, PA 19486, (215) 652-1583, fax (215) 993-3200, e-mail: lokesh_bhattacharyya@merck.com

Glycosylphosphatidylinositol Anchors. P. Konradsson, University of Stockholm, e-mail: pk@admin.organ.su.se.

Carbohydrate Nomenclature. D. Horton, Dept. of Chemistry, American University, 4400 Massachusetts Ave., NW., Washington, D.C. 20016-8014, (202) 885-1767, fax (202) 885-1095, e-mail: carbchm@american.edu

Solid-Phase Oligosaccharide Synthesis. J. Gervay, Dept. of Chemistry, University of Arizona, Tucson, AZ 85721, (520) 621-8843, fax (520) 621-8407, e-mail: gervayj@ccit.arizona.edu

Contributed Papers. Z. Witczak

Chemicals and Materials from Renewables (Cosponsored with CELL). E. Chornet, National Renewable Energy Lab, 1617 Cole Blvd., Golden, CO 80401, (303) 384-6240, fax (303) 384-5103, e-mail: echornet@coupal.gcm.usherb.ca; J. Bozell, National Renewable Energy Lab, 1617 Cole Blvd., Golden, CO 80401, (303) 384-6276, fax (303) 384-6103, e-mail: joe_bozell@nrel.gov

**ACS CARBOHYDRATE DIVISION ELECTIONS:
Invitation for Nominations**

The Bylaws of the Division of Carbohydrate Chemistry require that the Nomination Committee solicit nominations for officers and elected committee members from members of the Division. The Nominating Committee would like to receive suggestions for the positions to be filled, and names will appear on the ballot included with the Summer newsletter. The bylaws state that "preference should be given to qualified members of the Division who have not yet held the office to be filled" and that "preference for the office of Chair elect should be given to a qualified member of the Division with previous experience on the Executive Committee." The offices and committee positions to be filled for 1999 are listed below. Names and supporting signatures should be sent to:

Alfred French
Cotton Fiber Quality Research Unit
Southern Regional Research Center
1100 Robert E. Lee Blvd
New Orleans, LA 70124

If you wish to nominate someone, but cannot obtain the ten signatures, submit the partially completed form. Remember to sign the form before submitting it. (Feel free to photocopy this form.)

Position: **Chair-Elect**

(circle one) **Councilor**

 Executive Committee (2 positions open)

 Wolrom-Isbell Awards Committee

Proposed Candidate: _____

Signatures:

CALL FOR PAPERS– ACS MEETING, AUGUST 1999

Chemicals and Materials from Renewable Resources

Renewable carbon is produced at a huge annual rate in the biosphere and has frequently been touted as a valuable source of useful chemicals, intermediates and new products. Using renewable feedstocks will progressively move toward a CO₂-neutral system of chemical production. The concept of a "biomass refinery" is often used to describe a process for converting renewable carbon into these materials. Interest in this topic is increasing rapidly as evidenced by the Gordon Conferences on Benign Organic Synthesis and workshops held by the Department of Energy, the Environmental Protection Agency, and the Green Chemistry Institute. However, the petrochemical industry has a significant lead in technology for selectively converting their primary raw material into products. The scope of methodology for conversion of biomass is much smaller, and the list of products available from biomass is much shorter than for petrochemicals.

This symposium solicits papers from research groups currently working to develop the tools necessary for novel, selective chemical transformations of nontraditional feedstocks into small molecules (non-fuel applications) and discrete building blocks from renewables. Feedstocks include monosaccharides, polysaccharides (cellulose, hemicellulose, and starch) extractives, lignin, lipids and proteinaceous compounds. New transformations of these feedstocks using homogeneous and heterogeneous catalysis are solicited, as are new biochemical transformations. Papers on mechanism of transformations are also invited. Groups working to identify and exploit new renewable building blocks are encouraged to participate. The symposium anticipates individual sessions on synthesis and use of levulinic acid and levoglucosan, as well as sessions on new transformations and new building blocks from renewables.

Please send abstracts by Friday, April 23rd on the standard ACS abstract form to:

Joseph J. Bozell
National Renewable Energy Laboratory
1617 Cole Boulevard
Golden, CO 80401
phone: 303-384-6276
FAX: 303-384-6103
email: bozellj@tcplink.nrel.gov

Late abstracts cannot be accepted because of the CELL and CARB division deadlines.