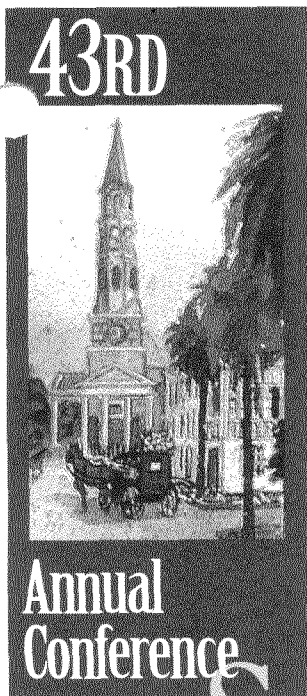


Welcome to the 43rd Annual Bioassay Conference



on Bioassay,
Analytical
Environmental
Radiochemistry

November 9-13, 1997

The sponsors, organizing committee and participating vendors welcome you to the 43rd Annual Conference on Bioassay, Analytical, and Environmental Radiochemistry. This year our organizing committee has prepared a comprehensive schedule of technical presentations on important current issues as well as a full schedule of social functions. We hope that this year's conference will give us all the opportunity to exchange ideas and concepts that will lead to overall improvement in the quality of our scientific work, and will provide a social setting that will enable us all to get to know each other better.

This year's format will follow closely to that of Bioassay Conferences over the past several years. There will be Technical Workshops on Sunday and Monday, and the Bioassay Conference will begin on Tuesday.

Social activities will begin Sunday evening with a reception sponsored by Canberra Industries, Eichrom Industries, and Environmental Physics, Inc. which will be held at Environmental Physics. Bus transportation from the Francis Marion will be provided. The next major function will be the vendor reception on Monday night at the Francis Marion that is being sponsored by Eichrom Industries. Canberra Industries and Packard Instruments will sponsor a luncheon at the Francis Marion on Tuesday, and the final social function will be the Conference Beach Party on Wednesday evening on Sullivans Island. Bus transportation from the Francis Marion Hotel will be provided.

In addition to these major functions, there will be a number of other social events. Continental Breakfast will be served each morning of the conference at the Francis Marion. There will be a Golf Tournament on Sunday morning that is being coordinated by Brian Crandall of Westinghouse Savannah River Company. There will be a complimentary hospitality suite at the Francis Marion on Tuesday night sponsored by Nuclear Technologies. There will be a Fun Run/Walk on Wednesday morning coordinated by Nancy Slater of Environmental Physics. And last, but certainly not least, there will be a special walking tour of Charleston for spouses on Tuesday morning that will be coordinated by my wife Charlotte.

During your stay, we encourage you to take advantage of the many attractions of Historic Charleston. The Francis Marion is within walking distance of the old sections of Charleston and you are only minutes away from charming alleys, beautiful anti-bellum homes, and an abundance of world-class restaurants.

We have included in your binder a map of the historic district of Charleston and some information on some of its fine restaurants and intriguing sites. Several restaurants have been chosen by the committee on the basis of quality and location and they have agreed to give special discounts to conference attendees. These restaurants are listed in the attached information. The Charleston Chamber of Commerce has kindly offered to maintain a booth in the conference registration area with information on Charleston and its many wonders.

We would like to give special thanks to our coordinators, sponsors, vendors, and speakers for their diligent efforts to make the 43rd Conference the best ever.

Sincerely yours,

Heyward H. Coleman
President, Environmental Physics
Conference Chairman

P. O. Box 30712

Charleston, SC 29417

(803) 556-8171

Fax: (803) 766-1178

Sponsored by:

Environmental Physics, Inc.

Westinghouse

Savannah River Company

Florida State University

Eichrom Industries

The College of Charleston

Sponsors

- **Environmental Physics, Inc.**
Charleston, SC
- **Westinghouse Savannah River Company**
Aiken, SC
- **Florida State University**
Tallahassee, FL
- **Eichrom Industries, Inc.**
Darien, IL
- **College of Charleston**
Charleston, SC

Coordinating Committee

Conference Chairman	Heyward H. Coleman	Environmental Physics, Inc.
Vendor Chairman	Mike Fern	Eichrom Industries
Technical Program Chairman	Dr. Bill Burnett	Florida State University
Workshop Chairman	Dr. Mohib (Mo) Khalil	Westinghouse Savannah River
Coordinating Chairman	Nancy Slater	Environmental Physics, Inc.
Workshop Program	Brian Crandal	Westinghouse Savannah River
Technical Program	Dr. Frank Kinard	College of Charleston
Social Program	Max Sparwasser	Environmental Physics, Inc.
Internet Home Page	Donivan Porterfield	Los Alamos National Laboratory

Vendors

3M	Acadia Insurance Company	American Radiation Services
Analytics	Aptec Nuclear	Chemcheck Instruments
Bioscan Inc.	Canberra Industries	Barringer Laboratories
CEM Corporation	EG&G ORTEC	Eichrom Industries
Environmental Express	Environmental Physics	Gamma Products
Isotope Products Laboratories	Nuclear Technical Assoc.	Ordela
Outreach Laboratory	Oxford Instruments	Packard Instrument Company
Protean Instrument Corporation	Thermo NUtech	TVA Radiological Services
QST Environmental	Quanterra	Nuclear Technology Services
Pulcir, Inc.		

Session Chairmen

Bill Burnett	Larry Robinson	Frank Kinard
Myint Thein	Brian Crandal	Mike Schultz
Mo Khalil	Donivan Porterfield	Robin Young
Barry Stewart	Donna Beals	Gary Kramer

43rd Annual Bioassay Conference Schedule of Events
November 9-13, 1997 Charleston, South Carolina

<u>Sunday, November 9</u>	<u>Monday, November 10</u>	<u>Tuesday, November 11</u>	<u>Wednesday, November 12</u>	<u>Thursday, November 13</u>
7:15—until Golf Outing		9:15—until Spouse Program-- Tour of Charleston and Lunch	6:15 am Historic Charleston Fun Run/Walk Sponsored by Environmental Physics, Inc.	
8:00-9:00 Continental Breakfast Mezzanine Level	7:00-8:00 Continental Breakfast Mezzanine Level	7:00-8:00 Continental Breakfast Colonial Room	7:00-8:00 Continental Breakfast Colonial Room	7:00-8:00 Continental Breakfast Mezzanine Level
8:00-7:00 pm Conference Registration and Information Mezzanine Level	7:30-5:00 Conference Registration and Information Mezzanine Level	7:30-5:00 Conference Registration and Information Mezzanine Level	7:30-3:30 Conference Registration and Information Mezzanine Level	
9:00-12:00 Workshops Colonial Room	8:00-12:00 Workshops Colonial & Calhoun	8:00-12:00 Technical Presentations Colonial Room	8:00-11:40 Technical Presentations Colonial Room	8:00-12:00 Technical Presentations Pinkney & Calhoun
12:00-1:30 Lunch On Your Own	12:00-1:15 Lunch On Your Own	12:00-1:30 Conference Luncheon sponsored by Canberra and Packard Gold Room	11:40-1:30 Lunch On Your Own	12:00 End of Conference
1:30-5:30 Workshops Colonial & Calhoun	1:15-5:00 Workshops Colonial & Gold	1:30-5:10 Technical Presentations Colonial Room	1:30-1:50 Business Meeting Founder's Award	
6:00-9:30 Reception sponsored by Canberra, Eichrom, & Environmental Physics (Buses depart from the Francis Marion beginning at 5:30)	5:30-7:30 Vendor Reception sponsored by Eichrom Industries Vendor Display Area	5:30-7:30 Complimentary Entertainment Suite sponsored by Nuclear Technology & Nevada Technical Association (Suite to be Announced)	1:50-4:50 Technical Presentations Colonial Room	
	5:30-7:30 Vendor Exhibition Mezzanine Level	8:00-5:10 Vendor Exhibition Mezzanine Level	8:00-3:30 Vendor Exhibition Mezzanine Level	
			6:00-11:00 Beach Party on Sullivan's Island (Buses depart from the Francis Marion beginning at 5:30)	

Description of Social Events

**Sunday 7:15 a.m.--until
Golf Outing**

Sunday 6:00-9:30 p.m.

Reception at Environmental Physics, Inc. (2040 Savage Road, Charleston)

Join us at Environmental Physics, Inc. for cocktails and delicious lowcountry hors d'oeuvres. The reception is being hosted by Canberra Industries, Eichrom Industries, and Environmental Physics, Inc. Round-trip transportation will be provided, and buses will depart from the Francis Marion beginning at 5:30 p.m. Attire is casual.

Monday 5:30-7:30 p.m.

Vendor Reception located in the Vendor Display Area

Enjoy hot and cold hors d'oeuvres and an open bar while visiting the excellent displays provided by our twenty-six vendors. The vendor reception is being sponsored by Eichrom Industries.

Tuesday 9:15—until

Spouse Program

Meet in the lobby of the Francis Marion at 9:15 a.m. for a day touring Charleston with your hostess, Charlotte Coleman. First, you will visit the Charleston Visitor's center where the DASH will take you to the Waterfront Park to begin the guided walking tour of Charleston. After the walking tour, a lowcountry seafood lunch will be provided at Hyman's. After lunch, the group will tour the Nathaniel Russell House, one of Charleston's finest historical landmarks. End the afternoon at the Coleman's home for tea and coffee. Also included in the spouse program are continental breakfasts, all of the evening receptions, and the beach party.

Tuesday 12:00-1:30

Conference Luncheon in the Gold Room

The Conference Luncheon speaker is Dr. Bill Reinig, who will discuss the history of Savannah River Site. Canberra Industries and Packard Instruments are the hosts for the Luncheon.

Wednesday 6:15 a.m.

Historic Charleston Fun Run/Walk

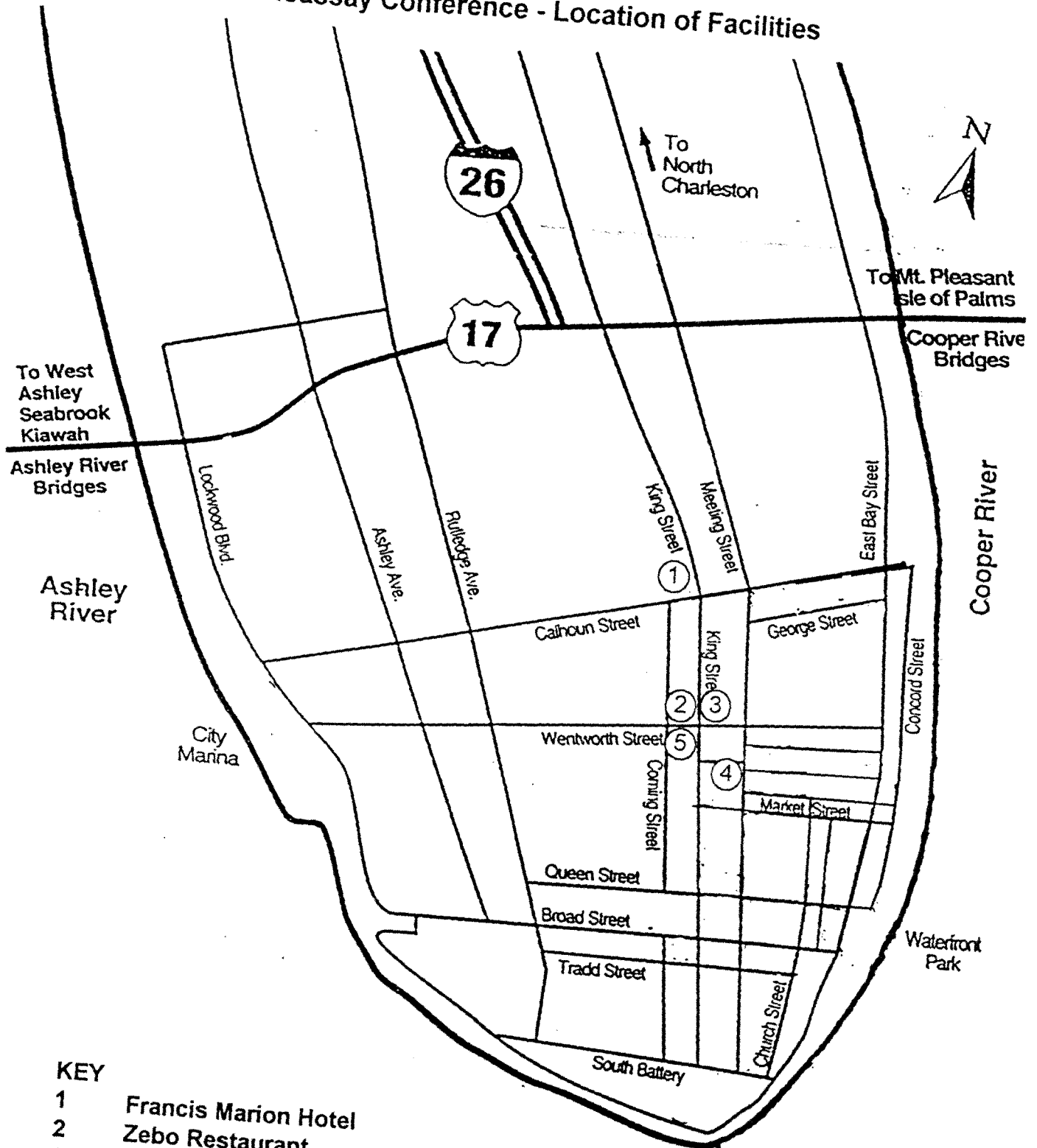
Rise and Shine! Meet us in the lobby of the Francis Marion at 6:15 a.m. for a fun run/walk! Set your own pace for the 2.8-mile course through historic Charleston (beginning and ending at the Francis Marion). Each participant earns a t-shirt. The Fun Run/Walk is sponsored by Environmental Physics, Inc.

Wednesday 6:00-11:00 p.m.

Lowcountry Beach Party at the Citadel Beach House on Sullivan's Island

Enjoy an evening at a Sullivan's Island beachfront clubhouse for a lowcountry banquet featuring Frogmore Stew. The sound of the surf will be enhanced by live music by the Mike McSwain Group. Round-trip transportation is provided, and buses depart from the Francis Marion beginning at 5:30 p.m. Attire is casual.

43rd Bioassay Conference - Location of Facilities



- KEY**
- 1 Francis Marion Hotel
 - 2 Zebo Restaurant
 - 3 Sushi Hiro Restaurant
 - 4 Hyman's Seafood Company
 - 5 Taste of India

Charleston Harbor

Things to See and Do

Bicycle Rentals:

Charleston Bicycle Rentals, Inc.
48 John Street, Charleston, 29403
722-RIDE (7433)

Biking is the best way to see Charleston. Stay fit and have fun too! Ask about our free pickup and delivery to most locations in downtown Charleston. Next to the Visitor Center.

Charter Boats:

Aqua Safaris, Inc. Charter Yachts
P.O. Box 309, Isle of Palms, 29451
886-8133, 1-800-524-3444, FAX: 886-8133
Group Rates Available - yes

Affordable sail/power/fishing charter yachts, crewed and bare boat. Over 1000 yachts locally and worldwide. Day sails, golf/sail weekends. Worldwide term charters: Caribbean, Mediterranean, Greek Islands, South Pacific.

Bohicket Yacht Charters - 768-1280

Cape Romain Island Charters - 884-0448

Captain Ivan's Island Charters - 795-9192

Charleston Charter Co.
P.O. Box 1427, Charleston, 29402
762-7900, 1-800-786-0252, ext. 335
Group Rates Available - yes
Specialize charters to meet individual/group needs -from sunset cruises to burials at sea.

Charleston Yacht Sales
3 Lockwood Blvd., Ste. 201, Charleston, 29403
577-5050, 1-800-868-5060, FAX: 723-9829
Group Rates Available - yes
We offer sailing charters aboard 35'-50' captained yachts for 3 hours to a full day. The largest and oldest yacht broker in the Carolinas.

Fort Sumter Tours, Inc. - 722-1691

Gray Line Water Tours - 722-1112

Marsh Grass Charters, Inc.
1310 Ashley Hall Road, Charleston, 29407
556-6555

We price our charters by the number of people (up to 6). We offer bottom fishing for snapper & grouper or trolling for the big ones.

Saltwater Adventures
2412-B Marina Rd, Wadmalaw Island, SC
559-3794, PAGER: 769-1542
We offer fishing and/or pleasure charters, captained or bare boat, from under 20 to over 65 feet, for any occasion or time period.

Silver Dolphin Fishing - 556-3526

Southern Windjammer/Schooner PRIDE
2044 Wappoo Hall Road, Charleston, 29412
795-1180, FAX: 762-1342

Sail aboard Charleston's only tall ship - the 84 foot three masted Schooner PRIDE. For those who want to have a refreshing and relaxing harbor experience.

Sportn' Life Charters
Rt. 1, Box 50-D, Wando, SC 29492
881-3179

In-shore light tackle and fly fishing. Tours and day trips available for 1-4 persons.

Wild Dunes Yacht Harbor
41st Ave. at the Intracoastal Waterway
Isle of Palms, 29451
886-5100, FAX: 886-5609

Resort marina and restaurant. Inshore-offshore fishing and sail-boat charters, boat rentals and excursions. Dockside dining, private dining room, and outdoor events.

Events:

Charleston Area Arts Council
P.O. Box 21295, Charleston, 29413
566-0075

The Arts Council can provide information about the cultural opportunities available to your group while they are in Charleston.

Spoletto Festival U.S.A.
P.O. Box 157, Charleston, 29402
722-2764, FAX: 723-6383

Group Rates Available - yes
Celebrating dance, music, theater, opera, and the visual arts, from the classic to the contemporary, for 17 days in historic Charleston. Late May-early June.

Golf:

Charleston National Country Club - 884-7799

Crowfield Golf and Country Club
300 Hamlet Circle, Goose Creek, 29455
764-4618, FAX: 764-4534

Dunes West - 881-6060

Kiawah Island Resort - 768-2121 - space available

The Links at Stono Ferry
5365 Forest Oaks Dr., Charleston, 29449
763-1817, FAX: 763-1905
Charleston's premier public golf course -15 minutes from downtown. Stono Ferry offers the full amenities of a county club at an unbeatable price!

Municipal Course - 795-6517 - public

Patriots Point Links
100 Clubhouse Drive, Mt. Pleasant, 29464
881-0042
*Group Rates Available - yes
Patriots Point Links offers a scenic setting overlooking Charleston Harbor. This harborside course will challenge any level of player...a true pleasure to play.*

Pine Forest Country Club
1000 Congressional Blvd, Summerville, 29483
851-1193, FAX: 851-2857
Nominated for best new golf course in South Carolina. 18 hole, par 72 championship design by Bob Spence.

Things to See and Do

Shadowmoss Plantation Golf Club

20 Dunvegan Drive, off Hwy. 61 North, Charleston, 29407
556-8251, 1-800-338-4971

Relaxing atmosphere nestled within the historic beauty of Charleston.

Seabrook Island - 768-1000 - private

Snee Farm - 884-8571 - private

Wild Dunes Resort - 886-6000

Historic Homes & Buildings:

The Charleston Museum's Aiken-Rhett House

48 Elizabeth Street, Charleston 29403

723-1159, FAX: 722-1784

Group Rates Available - yes

Home of Gov. William Aiken, 1833-1887. Used by Confederate General P.G.T. Beauregard during the 1864 bombardment as headquarters. Greek and Rococo Revival styles used.

The Avery Research Center for African-American History & Culture

125 Bull Street, Charleston, 29424

727-2009, FAX: 727-2017

Research Center & Museum that documents African-American historical and cultural contributions in SC Lowcountry. Beautiful historic building (c.1865); 1990 Carolopolis Award.

The College of Charleston - 792-5507

The Dock Street Theatre - 723-5648

Edmondston-Alston House

21 East Battery - 722-7171

The Thomas Elfe House - 722-2130

Old Exchange Building & Provost Dungeon

122 East Bay Street, Charleston, 29401

727-2165, FAX: 727-2163

Over 300 years of Pirates, Patriots, Presidents, and Preservation. One of 3 most important buildings in American History.

Fort Moultrie, A unit of Fort Sumter National Monument

1214 Middle St., Sullivan's Island

883-3123

At Fort Moultrie you can experience 171 years of coastal military history. The fort defended Charleston's harbor from the Revolutionary War through World War II.

The Charleston Museum's Heyward-Washington House

87 Church Street, Charleston, 29401

722-0354, FAX: 722-1784

Group Rates Available - yes

Built in 1772 by prominent rice planter Daniel Heyward. Furnished with rare Charleston pieces. 18th century house with original kitchen, carriage house, and necessary buildings.

The Charleston Museum's Joseph Manigault House

350 Meeting Street, Charleston, 29401

723-2926, FAX: 722-1784

Group Rates Available - yes

Designed by wealthy rice planter Gabriel Manigault, built in 1803. One of the best examples of Adam-style architecture. Furnished with Charleston, American, English, and French pieces.

Nathaniel Russell House

51 Meeting Street, Charleston, 29401

723-1623

Museums & Galleries:

American Military Museum - 723-9620

The Citadel Museum - 792-6846

The City Hall Gallery

The Charleston Museum

360 Meeting Street, Charleston, 29403

722-2996, FAX: 722-1784

Group Rates Available - yes

America's first and oldest museum that interprets the social and natural history of the South Carolina Lowcountry. Special temporary exhibits and a "Discovery Room" for children.

The Confederate Museum - 723-1541

Gibbes Museum of Art

135 Meeting Street, Charleston, 29401

722-2706, FAX: 723-1721

Offers one of the finest collections of American paintings in the Southeast, portraits, local and regional historic paintings, and portrait miniatures. Museum shop available.

Patriots Point Naval & Maritime Museum

40 Patriots Point Rd., Mt. Pleasant, 29464

884-2727

Patriots Point is the world's largest naval & maritime museum. Five ships, including the aircraft carrier Yorktown, are open for touring. Twenty aircraft. Vietnam Naval Support Base exhibit.

Nightlife:

JukeBox

Vendue Range, Charleston, 29401

723-3431

Windjammer - 886-8596

Plantations, Parks, and Gardens:

Charles Towne Landing 1670

1500 Old Towne Road, Charleston 29407

556-4450

Birthplace of South Carolina - First permanent English settlement in South Carolina - Passive park.

Drayton Hall

3380 Ashley River Road, Charleston, 29414

766-0188, FAX: 766-0878

Considered one of the finest examples of colonial architecture in the nation, Drayton Hall is the only surviving plantation home on the Ashley River and is preserved in almost original condition after over 250 years.

Fort Sumter

1214 Middle Street, Sullivan's Island
883-3123

Fort Sumter - first shots of the Civil War.

Magnolia Plantation and Gardens/Audubon Swamp Garden

Hwy. 61, Charleston, 29407
571-1266

Catering Services Available - yes

Group Rates Available - yes

Magnolia Plantation's gardens have been described as the "world's most beautiful" and are planted for year-round bloom. Audubon Swamp Garden allows an up-close view of wildlife in a natural setting.

Middleton Place

Ashley River Road, Charleston, 29414
556-6020, 1-800-782-3608, FAX: 766-4460

Private Banquet Rooms Availableyes

Seating Capacity.....125

Meals Served.....lunch

Catering Services Available.....yes

Group Rates Available.....yes

Visit America's oldest landscaped gardens, now celebrating 250 years, the working plantation stables, and the Middleton Place House museum.

Recreation:**Charleston Jewish Community Center**

1645 Raoul Wallenberg Blvd., Charleston 29407
571-6565, FAX: 556-6206

Family oriented...full size gymnasium, fitness center and nautilus circuits, contains cardiovascular room, free weights, aerobic classes, and outdoor olympic-sized pool.

Eagle Balloons

100 Broadmarsh Ct., Charleston, 29418
552-3782

Soar above the treetops, at wind's speed for approximately one hour, and enjoy a breathtaking panoramic view of Charleston's Lowcountry. Our pilots are FAA certified. We fly year round, weather permitting. Reservations are required. Please call for further details.

Kids on the Go

P.O. Box 44, Isle of Palms, 29451
883-9491

An invaluable family guidebook set: Kids on the Go: Great Places to Take Kids in The Charleston Area and Great Places to Dine with Kids.

St. Andrew's Family Recreation Center

1642 Sam Rittenberg Blvd., Charleston, 29407
763-3850

A full-service health and fitness center available on a daily basis. Enjoy aerobics classes, racquetball, indoor swimming, Nautilus and free weights, cardiovascular equipment, and more.

South Carolina Stingrays

North Charleston Coliseum, North Charleston 29418
744-BAIT, FAX 744-2898

Professional Ice Hockey at the new North Charleston Coliseum. 34 home games from late October until early April.

Restaurants:**A.W. Shucks, Downtown**

35 Market St. & 70 State St.
723-1151, FAX: 720-2102

Seating Capacity.....225

Patio Dining Available

Patio Capacityup to 300

Meals Served.....lunch/dinner

LocationHistoric Market area

Old warehouse charm . . . seafood specialties and raw bar.

Aaron's Deli - 723-6000**Applebee's Restaurant/North Charleston - 553-8137****Applebee's Restaurant/Charleston - 723-3531****Applebee's Restaurant/West Ashley**

1859 Sam Rittenberg Blvd., Charleston, 29407
556-6421

Seating Capacity175

Outstanding food & service at reasonable rates in a relaxing atmosphere.

Arizona Bar & Grill - 577-5090**B. J.'s Broad Street Cafe**

17 Broad Street, Charleston, 29401
722-0559

Private Banquet Rooms Availableno

Seating Capacity.....76

Meals Served.....breakfast/lunch/dinner

Catering Services Availableno

LocationPeninsula City

Great food at reasonable prices in an old Charleston setting.

Pizza, gourmet sandwiches, outstanding breakfasts, and authentic buffalo-style chicken wings. Mon.-Fri., 7:30-11p.m., Sat. 8:30-11p.m.

Baker's Cafe of Charleston, Inc. - 577-2694**Blue Coyote Grille**

61 State Street, Charleston, 29401
577-2583, FAX 720-2102

Seating Capacity.....150

Patio Dining Available

Patio Capacityup to 300

Meals Served.....lunch/dinner

LocationHistoric Market area

Lively Southwestern restaurant and night club featuring quesadillas, fajitas, and country line dancing.

Bocci's Italian Restaurant

158 Church Street, Charleston, 29401
720-2121, FAX: 720-2102

Private Banquet Rooms Availableyes

Seating Capacity.....20

Meals Served.....lunch/dinner

Group Rates Availableno

LocationHistoric Market area

Laid-back Italian dining with old world charm. Hand pulled mozzarella and pastas made on-premise contribute to both classic and contemporary dishes for a memorable meal. Voted "Top 10" locally.

Things to See and Do

Cappy's Seafood Restaurant

2408 Maybank Hwy, Johns Island, 29455
559-3552

Private Banquet Room Available.....no
Meals Served.....lunch/dinner
Catering Services Available.....yes
Location.....Island Resorts

Waterfront dining at Buzzard's Roost Marina. Enjoy our delicious, fresh local seafood or our featured Lowcountry cuisine.

Carolina's - 724-3800

Celia's Porta Via - 722-9003

Colony House Restaurant

35 Prioleau at the Waterfront Park, Charleston, 29401
723-3424, FAX: 724-3807

Private Banquet Rooms Available.....yes
Banquet Capacityup to 200
Reception Capacity350
Meals Served.....lunch/dinner
Catering Services Available.....yes
LocationPeninsula City

Charleston's oldest, located across from the new Waterfront Park.

Tommy Condon's Irish Restaurant and Pub

160 Church St., Charleston 29401
577-3818

Private Banquet Room Availableyes
Banquet Capacity60
Seating Capacity.....230
Meals Served.....lunch/dinner
LocationHistoric Market area

Authentic Irish pub featuring weekend Irish sing-a-longs and great food every day.

Doe's Pita Plus - 577-3179

82 Queen

82 Queen Street, Charleston, 29401
723-7591

Private banquet room for 30 people. Voted best restaurant by the people of Charleston, 82 Queen offers a variety of Lowcountry delicacies in a unique 18th century setting.

East Bay Trading Co. - 722-0722

Fast & French Inc., Gaulart & Malicet French Cafe

98 Broad Street, Charleston, 29401
577-9797

Private Banquet Rooms Available.....no
Meals Served.....breakfast/lunch/dinner
Catering Services Available.....yes
Group Rates Available.....yes
LocationPeninsula City

A contemporary Paris cafe in an 1825 building. Quality food served all day at very good prices.

French Quarter Restaurant

195 East Bay (located in Lodge Alley Inn), Charleston, 29401

722-1611, 1-800-845-1004, FAX: 722-1611, ext. 7777

Private banquet room available for 60 people. Exquisitely prepared European and Lowcountry cuisine. Featuring a French Grand Rotisserie. Serving breakfast, lunch, and dinner daily.

Hyman's Seafood Company - 723-0233

J. Ryan's Seafood Restaurant - 763-4494

Josie Joe's on the Water

1313 Shrimp Boat Ln., Mt. Pleasant, 29464
884-0838, FAX: 884-5483

Private Banquet Rooms Available.....yes
Meals Served.....lunch/dinner
Catering Services Available.....yes
Location.....East Cooper/Mt. Pleasant

We offer a variety of seafood, salads, and sandwiches. Enjoy cocktails and appetizers by the pool. Come by land or sea and experience an unforgettable sunset.

Kyoto Japanese Restaurant - 571-6025

Le Midi - 577-5571

The Library at Vendue

23 Vendue Range, Charleston, 29401
723-0485, FAX: 722-8381

Private Banquet Facilities Available.....yes
Meals Served.....dinner
Catering Services Available.....yes
LocationPeninsula City

Progressive American Cuisine in the Vendue Inn Library. Roof top bar and dining overlooking the Charleston Harbor.

Little Caesars Pizza

Charleston Area
571-3764

We can handle any size party! party! Choose from our delicious original or pan pizza. Discounts on group orders.

Long Island Cafe - 886-8809

The Long Room - 722-6092

Marianne Restaurant

235 Meeting Street, Charleston, 29401
722-7196, FAX: 722-2096

Private Banquet Rooms Availableyes
Reception Capacity32
Meals Servedlunch/dinner
Catering Services Availableno
Group Rates Availableyes
LocationPeninsula City

French restaurant in renovated historic building. Local fresh fish, mussels, rack of lamb, and beef. Entertainment in lounge nightly. Private banquet room for up to 32 people.

McDonald's Hamburgers - 723-2211

Mister Donut - 553-5333

Morrison's Cafeteria - 571-6700

Noisy Oyster

7571 Rivers Ave., N. Charleston
824-1000

The best fresh, local seafood in North Charleston. From oyster puppies and alligator to deep fried lobster tails and daily specials. A rustic, nautical setting with the charm of dockside dining.

The Oriental Cuisine - 747-9812

Poogan's Porch Restaurant

72 Queen Street, Charleston, 29401

577-2337, FAX: 722-1698

Private Banquet Rooms Availableyes
 Banquet Capacity50
 Reception Capacity100
 Meals Served.....lunch/dinner
 Catering Services Available.....yes
 Group Rates Available.....yes
 LocationPeninsula City

*Enjoy true Southern hospitality in an "Old Charleston" home.**Dine indoors or outside on our porches and patio. Fresh seafood and Lowcountry Southern cuisine.***Primrose House Restaurant**

332 East Bay Street, Charleston, 29402

723-2954

Private Banquet Rooms Availableyes
 Seating Capacity40
 Banquet Capacity40
 Reception Capacity40
 Meals Servedbreakfast/lunch/dinner
 Catering Services Availableyes
 Group Rates Availableyes
 LocationPeninsula City

*Small, intimate restaurant tucked into ground floor of an antebellum mansion. This off-the-beaten-path secret has a devoted international and local following. Owner-chefs.***Privateer Restaurant**

1882 Andell Bluff Blvd., Johns Island, 29455

768-1290, FAX: 768-9567

R B's Rusty Pelican - 881-0466**Reeves Bar-B-Que** - 763-5798**Restaurant Million** - 577-7472**Reuben's Downtown Delicatessen**

251 Meeting Street, Charleston, 29401

722-6883

Private Banquet Rooms Availableno
 Meals Servedbreakfast/lunch/dinner
 Catering Services Availableyes
 Group Rates Availableno
 LocationPeninsula City

*"Eat where the locals eat" in the heart of downtown Charleston, 2 blocks north of Market Street. Homemade soups/salads/sandwiches.***Robert's of Charleston**

112 N. Market St., Charleston 29401

577-7565, 1-800-729-0094, FAX: 723-2206

Private Banquet Rooms Availableyes
 Seating Capacity.....36
 Meals Served.....dinner
 Catering Services Available.....no
 LocationPeninsula City

*A unique musical dining experience since 1976. Enjoy an elegant, prix-fixe six course dinner in Robert's intimate setting while our vocalist performs Broadway show tunes for your pleasure.***Ronnie's Seafood Restaurant** - 884-4074**S&S Cafeterias**

1104 Sam Rittenberg Boulevard, Charleston, 29407

556-9420

*Cafeteria dining with a choice of 18 salads and desserts, 22 vegetables, and 15 meat entrees to suit everyone's taste.***Sadie's Cafeteria** - 553-0250**Saracen Restaurant** - 723-6242**Shem Creek Bar & Grill** - 884-8102**Terrible Tom's**

188 Meeting Street, Old City Market, Charleston, 29401

722-6752

*Croissants, soup, sandwiches, lite lunches. World's finest puff pastry. We will open early to accommodate your group.***The Trawler Seafood Restaurant**

Hwy. 17 N., Mt. Pleasant, 29464

884-2560

*Waterfront dining outside and inside, Sunset hour (happy hour), Raw-bar, Lounge-bar, Lunch-Dinner 7 days a week.***Wild Dunes Yacht Harbor/Tradewinds Restaurant**

41 st Ave., at Intracoastal Waterway, Isle of Palms, 29451

886-5100, FAX: 886-5609

Private Banquet Rooms Availableyes
 Seating Capacity200
 Banquet Capacity200
 Reception Capacity400
 Meals Servedbreakfast/lunch/dinner
 Catering Services Availableyes
 Group Rates Availableyes
 LocationIsland Resorts

*Resort marina and restaurant. Inshore/offshore fishing and sailboat charters, boat rentals and excursions. Dockside dining, private dining room, and outdoor events.***Wild Wing Cafe**

36 N. Market St., Charleston, 29401

722-9464

Private Banquet Rooms Availableyes
 Reception Capacity120
 Meals Served.....lunch/dinner
 Catering Services Available.....yes
 LocationPeninsula City

*Wide variety of "fun" foods. Nachos, quesadillas, homemade salsa and chips. PLUS 15 different flavors of "the Best Wings South of Buffalo" and the original bucket o' beer.***Shopping:****Antiques****Geo. C. Birlant & Co.**

171 King Street, Charleston, 29401

722-3842

*Direct importers of Charleston's largest collection of fine quality personally selected 18th and 19th century English furniture, silver, china, crystal, and brass.***Livingston & Sons Antiques, Inc.** - 723-9697**Art Galleries****The Audubon Shop & Gallery** - 723-6171

Things to See and Do

Virginia Fouche Bolton Art Gallery

127 Meeting Street, Charleston, 29401
577-9351

Virginia paints with unparalleled expertise and sensitivity, capturing the charm and mystery of Charleston.

Jim Booth Art Gallery

1929 Maybank Hwy., Charleston, 29412
795-8244, FAX: 795-8464

On display are original paintings, collector prints, and posters by Charleston's own Jim Booth.

Carolina Prints & Frames - 723-2266

Courtyard Gallery - 723-9172

Gallery 12 - 723-0311

Lowcountry Artists, Ltd. - 577-9295

Anne Worsham Richardson Birds I View Gallery

119-A Church Street, Charleston, 29401
723-1276

Bird and wildlife prints and original paintings by South Carolina artist, naturalist Anne Worsham Richardson.

Department Stores

Belk - 571-5420

Condon's - 556-3555

J. C. Penny Co. - 554-0300

Sears, Roebuck & Co. - 797-2100

Shadid's Department Store - 577-2800

Specialty Shops

A Basket O'Carolina - 723-7777

Anne's Dress Shop - 577-3262

Ben Silver Corporation

149 King Street, Charleston, 29401
577-4556, 1-800-221-4671, FAX: 723-1543

World's largest selection of jewelry quality blazer buttons and authentic regimental pure English silk neckties.

Berlin's - 722-1665

Bird Sales, Inc. - 577-5440

Bits of Lace - 577-0999

Bluestein's Men's Wear - 722-1738

Carolina Gifts and Seashells

1405 Ben Sawyer Blvd., Mt. Pleasant 29464
884-0320

Shells from around the world, nautical gifts, Charleston prints and souvenirs, tee shirts, salt-water taffy. Family fun for everyone!

Chapter Two Bookstore

199 East Bay St., Charleston, 29401
722-4238

Charleston's most complete bookstore with a large collection of books on Charleston and the Lowcountry.

The Charleston Catalog Company

139 Market St., Charleston, 29401
577-7462, 1-800-533-6629, FAX: 853-8708

Southern gifts, arts and crafts, food & home accessories, with an emphasis on Made-in-Charleston products. Quantity discounts available to meeting planners and corporations.

Charleston Post Card Company - 762-0771

The Country Bumpkin - 884-8808

The Clothes Horse

289 King St., Charleston 29401
853-9636, FAX: 723-5017

Factory outlet store . . . large selection of sterling silver jewelry

Croghan's Jewel Box

308 King St., Charleston, 29401
723-3594

A. J. Davis & Co., Inc - 577-3088

M. Dumas & Sons, Inc. - 723-8603

The Thomas Elfe House - 722-2130

Bob Ellis Shoe Store - 722-2515

Elza's, Inc. - 722-3334

Fulford-Egan Coffees & Teas

231 Meeting St, Charleston, 29401
577-4553, 1-800-736-4301

60s style coffeehouse where artists, students, professors, etc. congregate. Comfortable atmosphere, with great coffee, live music nightly. No cover. Over 150 bulk coffees available.

Geiss & Sons Jewelers - 577-4497

Gingiss Formal Wear - 553-8470

Good Scents, Inc. - 723-6933

Gucci - 722-3788

Haagen-Dazs Ice Cream Shoppe

43 S. Market St., Charleston 29401
723-9326

We feature the best ice cream and yogurt made . . . Haagen Dazs is world renowned!

Historic Charleston Reproductions - 723-8292

Horsefeathers - 723-7995

The John Huguley Co. - 740-1500

In Good Taste

1901 Ashley River Road, Charleston
763-5597

Gourmet foods, gift ideas, fine wines, great coffee, kitchen tools, seminars, low country foods.

Kiawah General Store - 768-9541

Jack Krawcheck - 722-1776

Kuppenheimer - 572-2292

Loco Record Shop - 744-0232

Lowell's Inc./dba Affordables - 571-0140

J.J.W. Luden and Co.

Concord and Charlotte Sts., Charleston, 29402
723-7829

*Authorized Orvis dealer. Serving Charleston since 1867.
Clothing, marine supplies, fly fishing supplies, guide services, fly
fishing school.*

Market Street Munchies - 722-0800

Market Street Sweets

100 North Market St., Charleston, 29401
722-1397, 1-800-364-2140

*Handmade Southern pralines and other candies, discount incen-
tives to conventions, free samples, gourmet gift baskets.*

Mitchell's Formal Wear - 572-5863

Mori Luggage & Gifts - 763-3644

Old Charleston Joggling Board Co. - 723-4331

Jack Patla Co. - 723-2314

Polo, Ralph Lauren - 722-6657

Prescription Center, Inc. - 723-5342

R & M Sporting Goods - 766-7102

R.S.V.P. - 577-9740

The Rainbow Market Shops

40 N. Market Street, Charleston, 29401

*The Rainbow Market is two unique interconnected buildings,
one-and-a-half centuries old, filled with distinctive shops.*

Scents Unlimited

92 N. Market Street, Charleston, 29401
853-8837

*The sensible place to shop for all of your fragrance needs with-
out spending a fortune.*

Sea Level, Inc. - 722-6487

Sheila's Shamrock - 577-0833

The Shops at Charleston Place

Located at the Omni Hotel

130 Market Street, Charleston 29401
722-4900

*"The best shopping in the history of Charleston", including Polo
Ralph Lauren, Gucci, Banana Republic, Talbots, Godiva, and 20
other fine shops.*

The Stockpot, Inc. - 723-9063

T & T Sporting Goods - 747-5000

Symphony:**Charleston Symphony Orchestra**

14 George Street, Charleston, 29401
723-9693, FAX: 722-3463

*With internationally renowned guest artists and acclaimed music
director David Stahl, the CSO performs a varied repertoire of
masterworks, chamber and pops music September through May.*

Theater:**Footlight Players, Inc.**

20 Queen Street, Charleston, 29401
722-7521

Live performances Oct.-May presented in small theatre which

*was a cotton warehouse. Charleston's resident community
theatre. Oldest (60 yrs.) community theatre in SC.*

Tours:**Carriage Tours****Carolina Carriage Company, Inc.**

170 Church St., Charleston, 29401
723-8687, FAX: 727-2797

Group Rates Available - yes

*Licensed guides conduct horse-drawn carriage tours of historic
Charleston. Private and group tours available.*

Charleston Carriage Company

96 N. Market Street, Charleston, 29401
577-0042

Old South Carriage Tours

14 Anson Street, Charleston, 29401
723-9712

*Tour guides wearing the Confederate uniform. Surrey-style car-
riages with 16-passenger capacity. 20% discount for adult
groups of 25 or more.*

Olde Towne Carriage Company

20 Anson Street, Charleston, 29401
722-1315, FAX: 881-4078

*Twenty-five custom carriages for larger groups, weddings and
private tours.*

Palmetto Carriage Works, Ltd.

40 N. Market Street, Charleston, 29401
723-8145

*60-minute tours. Best tour guides in town. Can accommodate
large groups. Private carriages available. Excellent spouse pro-
gram options.*

Private Guide Service:**Associated Guides of Historic Charleston**

P.O. Box 545, Charleston, 29402
724-6419

*Five lifetime Charleston residents available to show you their
hometown. Convention planning, private walking tours, and step-
on guide service for tour buses.*

Charleston Guide Service

253 St. Margaret St., Charleston, 29401
723-9023

*Guides professionally trained and versed in local lore presenting
an unparalleled insight into Charleston's three centuries of his-
tory and beauty.*

Charleston Strolls Guide Service

P.O. Box 1651, Charleston, 29402
766-2080

*Tours designed especially for your groups by experienced guides.
Step-on guides, walking tours, plantations, and gardens,
Beaufort and Georgetown, SC.*

Janice Kahn Tours

316 Confederate Circle, Charleston, 29407
556-0664

Group Rates Available - yes

*Tours made to order for your interest, budget, and time. Tours
conducted by Charlestonians with charm and wit who enjoy
showing you our city.*

Things to See and Do

Tours of Historic Charleston - 722-0026

Motorized Tours:

Adventure Sightseeing Inc.

1090 Ft. Sumter Drive, Charleston, 29412

762-0088, 1-800-722-5394

Group Rates Available - yes

The Best of Charleston. One and two-hour tours. A family owned business. See it all. Departs daily, 7 a.m.-10 p.m. Reservations accepted.

Charleston Historical Tours

P.O. Box 30201, Charleston, 29417

853-TOUR, 1-800-CHT-OUR1, FAX: 766-9067

Group Rates Available - yes

1 & 2-hour tours in the Old Town, leaving every 15 to 20 minutes. See plantations and gardens - you may get on and off our tour as many times as you like.

Colonial City & Plantation Tours

P.O. Box 20996, Charleston, 29413

871-2828, 1-800-844-8128, FAX: 871-2828

Group Rates Available - yes

The Platinum Tour of Charleston. One and two-hour tours available. Tours can include house museums to plantations. Call for details.

Colonial Coach & Trolley Co.

P.O. Box 12068, Charleston, 29412

795-3000

Group Rates Available - yes

Beautiful trolleys - Charleston's finest sightseeing and transportation vehicles.

"Doin' The Charleston" Tours, Inc.

P.O. Box 31338, 29417-1338

763-1233, 1-800-647-4487, FAX: 763-0028

Group Rates Available - yes

History with humor on an unique 90-minute tour of Charleston. Live narration vividly enhanced with music and slide show. 21 passenger mini-bus, air-conditioned comfort. Free downtown pickup.

Walking Tours:

Architectural Walking Tours of Charleston

Rt. 1, Box 1228, Round O, SC 29474

893-2327

An interpretation of the fascinating history of Charleston through its unique architectural heritage. Guided by an art historian and licensed city guide. Includes gardens, interiors.

Charleston Tea Party Walking Tours

57 1/2 Legare St.

577-5896

Group Rates Available - yes

Two-hour tour of Charleston architecture, gardens, churches, and preservation ending with a tea party in the private garden of the home of your guide.

Charleston Strolls

P.O. Box 1651, Charleston, 29402

884-9505 or 766-2080

Entertaining spousal programs personally designed for your group. Tour includes interiors. Introductions to Charleston at breakfast or lunch by our experienced guides.

Civil War Walking Tour - 722-7033

The Complete Walking Tour of Historic Charleston

c/o Charleston Publishing Co.

P.O. Box 16026, Charleston, 29412

795-7662

16-page guidebook of the Historic District. Charming illustrations. Leisurely, self-guided tour. Wonderful souvenir piece.

Elliott Walking Tours

94 Smith St., Charleston 29401

853-9608, 1-800-645-5503

EWT provides highly experienced and very knowledgeable guides, coupled with many other services to make your visit more enjoyable: private tours, local information, etc.

Historic Charleston Walking Tours - 722-6460

Al Miller Walking Tours - 723-1467

Water Tours:

"Charles Towne Princess" Gray Line Water Tours

17 Lockwood Dr., City Marina, P.O. Box 861, Charleston, 29402

722-1112, 1-800-344-4483, FAX: 577-3599

Group Rates Available - yes

Daily harbor tours with luncheon (spouse tours) sightseeing. Evening "Harborlites Dinner/Dance Cruise" or private charters available. Plan your theme!

Coastal Expeditions, Inc.

884-7684

Kayak tours and rentals. Enjoy the lowcountry from the water. Half-day Instructional Tours and full day Adventure Tours.

Fort Sumter Tours, Inc.

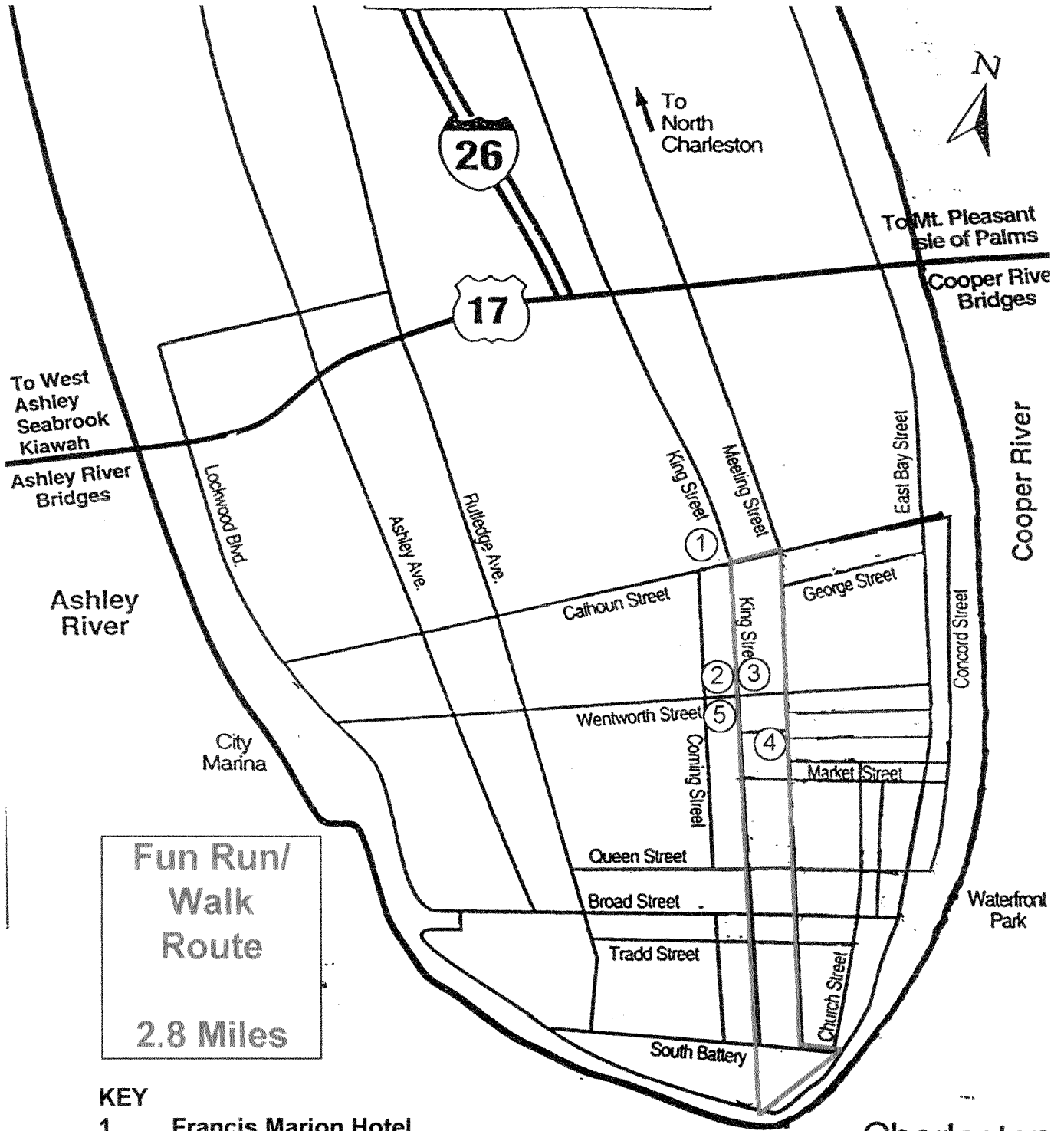
P.O. Box 59, Charleston, 29402

722-1691

Group Rates Available - yes

3 Tours: the only tour that stops at Fort Sumter; a tour of Charleston Harbor; an evening dinner & harbor cruise.

43rd Bioassay Conference - Route for Fun Run/Walk



**Fun Run/
Walk
Route**

2.8 Miles

KEY

- 1 Francis Marion Hotel
- 2 Zebo Restaurant
- 3 Sushi Hiro Restaurant
- 4 Hyman's Seafood Company
- 5 Taste of India

**Charleston
Harbor**

**43rd Annual Conference on Bioassay, Analytical
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Exhibitor Company Descriptions**

3M

3M Center, Bldg. 60-1S-16
St. Paul, MN 55144
Contact: Steve Alexander

tel: 612-733-2652
fax: 612-733-9520
toll free: 800-645-3550

3M manufactures and markets 3M™ Empore™ Rad Disks for the selective adsorption of radium, strontium or technetium. The disks are time membranes loaded with element-selective particles embedded in a stable inert matrix of PTFE fibrils. Empore Rad Disks dramatically cut sample preparation time in comparison to conventional preparation methods.

Analytics, Inc.

1380 Seaboard Industrial Blvd.
Atlanta, GA 30318
Contact: Daniel M. Montgomery

tel: 404-352-8677
fax: 404-352-2837
web: www.analyticsinc.com
email: analytics@mindspring.com

Analytics is a leader in the production of custom NIST-traceable radioactivity sources for calibration of alpha, beta, and gamma-ray detectors. Analytics also provides performance evaluation programs for effluent and environmental monitoring programs. Performance evaluations samples provide for assessment of the accuracy and precision of the entire analytical process.

Aptec Nuclear, Inc.

908 Niagara Falls Blvd., Ste. 524
N. Tonawanda, NY 14120-2060
Contact: Phil Stark, V.P. of Sales

tel: 716-754-7401
fax: 716-754-2389
web: <http://www.aptec-inc.com>
email: aptec@aptec-inc.com

Aptec has been a world leader in analytical and health physics instrumentation for over 25 years. We provide analytical instrumentation such as NaI(Tl) and HPGe detectors, low background shields, NIM or stand-alone spectroscopy units, PC-based MCA cards and systems, DC/Battery powered portable MCAs and quantitative detectors, hand & foot monitors, floor/parking lot monitors, tool monitors, and whole body surface contamination monitors for alpha/beta/gamma detection.

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Barringer Laboratories, Inc.

1500 West 6th Ave.
Golden, CO 80401

tel: 303-277-1687
fax: 303-277-1689
tol free: 800-654-0506
email: mrocha@barringer-labs.com

Established in 1961, Barringer Laboratories, Inc. Provides analytical services (inorganic, organic, and radiochemistry). Current projects include: LANL - waste management; McGuire BOMARC missile range; and the US Radium site.

Biosan, Inc.

4590 MacArthur Blvd.
Washington, DC 20007

tel: 202-338-0974
fax: 202-333-8514
toll free: 800-255-7226
web: www.bioscan.com
email: sales@bioscan.com

Bioscan is a developer of affordable instrumentation for radioisotope counting, luminometry, and chromatography. Major product lines include benchtop LSC counters and luminometers, TLC and gel scanners, and radio-HPLC detectors. Our recently introduced Lumi-Scint provides a battery operated field instrument for LSC measurements

Canberra Industries

800 Research Parkway
Meriden, CT 06450

tel: 203-639-2345
fax: 203-235-1347
toll free: 800-243-4422
email: fbronson@canberra.com

Canberra Industries is the worlds leading supplier of analytical instruments and applications-oriented systems used for the measurement and quantification of radioactive materials. Canberra products and services respond to the needs of the nuclear research, environmental monitoring, health physics, safeguards, waste management, decontamination and decommissioning, and environmental restoration.

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Exhibitor Company Descriptions**

CEM Corporation

3100 Smith Farm Road
Mathews, NC 28106
Contact: Greg LeBlanc, US Sales Manager

tel: 704-821-7015
fax: 704-821-8710
toll free: 800-726-3331
email: Info@cemx.com

CEM Corporation will exhibit microwave-based instrumentation for sample preparation prior to subsequent radio-chemical analysis. The STAR™ Open Vessel System digests large sample sizes (up to 10g) to achieve lower detection limits. The new MARS 5 Closed Vessel Digestion System provides high temperature and pressure reactions allowing complete destruction of organics.

CHEMCHEK INSTRUMENTS, INC™

Dr. Francis Jungfleisch, General Manager
1845 Terminal Dr, Suite #101
Richland, WA 99352

tel: 509-943-5000
fax: 509-946-3368
email: chemchek@cbvp.com

CHEMCHEK INSTRUMENTS, INC.™ is a small manufacturer of a quality analyzer for Trace metals Uranium and Lanthanides. The rugged Kinetic Phosphorescence Analyzer is fast, reliable, easy, sensitive, selective, economical. Achieve highly specific, precise, 10ppt detection limits using time resolved phosphorescence/fluorescence spectroscopy. ASTM & EPA approved methods.

Eichrom Industries, Inc.

8205 S. Cass Ave., Suite 107
Darien, IL 60561

tel. (630) 963-0320
fax (630) 963-1928
toll-free: (800) 422-6693
web: www.eichrom.com
e-mail: info@eichrom.com

Eichrom Europe, SARL

50, rue de Paradis
75010 Paris
tel. (01) 53 34 17 24
fax (01) 47 70 36 88

UK numbers:

tel. (01337) 827 715
fax. (01337) 827 716

Eichrom Industries manufactures and markets specialty chromatographic resins for selective radionuclide separations, analytical grade ion exchange resins and proprietary solvent extractants. With offices in the United States and France, Eichrom provides applications support directly to our customers in North America and Europe and, via a network of distributors, to scientists around the world.

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Environmental Express

490 Wando Park Blvd.
Mt. Pleasant, SC 29464

tel: 800-343-5319
fax: 803-881-3964
web: www.envexp.com
email: eexpress@awod.com

Environmental Express is a specialty laboratory supplier providing value added supplies and apparatus to environmental, industrial, and governmental laboratories. Products being displayed at the 43rd Bioassay Conference will be our Hot Block™ for glassware free metals digestions, the StepSaver™ for solid extraction, and disposable columns and accessories for actinide separations.

Environmental Physics, Inc.

2040 Savage Road
Charleston, SC 29407
Contact: David McNair, Vice President of Business Development

tel: 803-556-8171
Fax: 803-766-1178
web: www.gel.net
email: dhm@gel.com

Environmental Physics, Inc. (EPI), an affiliate of General Engineering Laboratories, Inc., provides radiochemistry analyses on environmental and bioassay samples to both government and industry. EPI is production oriented and has one of the highest throughput capacities of any private radiochemistry laboratory in the country. Together with General Engineering Laboratories, EPI provides full service mixed waste analysis and currently holds major contracts with the Department of Energy at thirteen of their weapons sites.

Gamma Products, Inc

7730 W. 114th Place
Palos Hills, IL 60465
Contact: Walter Meier, President

tel: 708-974-4100
fax: 708-974-0071
email: 103106.65@compuserve.com

Gamma Products, Inc. offers a choice of low background manual and automatic G5000 series A/B counting systems in single or multiple detector configurations. The G-3000 automatic marinelli changer is also available and can be adapted to a variety of samples. Gamma Products also offers low background standard and customized shielding.

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Isotope Products Laboratories

1800 N. Keystone Street

Burbank, CA 91504

Contact: Keith Ho

tel: 818-843-7000

fax: 818-843-6168

web: www.isotopeproducts.com

e-mail: sales@isotopeproducts.com

Isotope Products Laboratories is a NIST traceable laboratory supplying radioactive standards, sources and nuclides for counting room use, instrument calibration and environmental monitoring, specializing in custom requirements. A full line of nuclear medicine products is also available. Isotope Products Laboratories celebrates its 30th anniversary this year.

Nevada Technical Associates, Inc.

PO Box 90748

Henderson, Nevada 89009

Contact: Robert Holloway

tel: 702-564-2798

fax: 702-558-7672

web: <http://www.ntanet.net/>

email: nta@ntanet.net

Nevada Technical Associates, Inc., offers technical training and consulting in radiation safety, radiochemistry, quality assurance and related topics. Most of our courses are held in Las Vegas, Nevada. We also offer on-site courses that can be customized to the needs of the client. In 1998, we are offering 13 distinct courses.

Nuclear Technology Services, Inc.

635 Hembree Parkway

Roswell, GA 30076

Contacts: Dr Hermon Rao

Dr. Evgeny Taskaev

David Johnson

tel: 770-663-0711

fax: 770-663-0547

email: HermonRao2@AOL.COM

Radiological Services: NTS offers analytical services for a broad range of radiological samples. Our radiochemical laboratory is staffed with experienced professionals who analyze environmental, bioassay, effluent and waste samples for a full range of radionuclides. A broad spectrum of samples, including liquid, soil, vegetation, and bioassay can be handled in our laboratory. **Irradiation and Calibration Services:** Our Irradiation and Calibration Facility meet or exceed the industry requirements for the 1990's. Our facility is staffed with highly qualified personnel with extensive experience in the dosimetry and radiation detection instrument fields.

**43rd Annual Conference on Bioassay, Analytical
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Exhibitor Company Descriptions**

ORDELA, Inc.

1009 Alvin Weinberg Drive
Oak Ridge, TN 37830

Contact: Wayne P. Graves, Product Manager
Daniel M. Kopp, Technical Director

tel: 423-483-8675
fax: 423-483-8404
email: info@ordela.com

ORDELA, Inc. is a privately owned corporation formed in 1984 to provide specialized products, services, and systems for the scientific and industrial research community. ORDELA, Inc. produces a line of alpha spectrometry instrumentation, including the PERALS® Spectrometer and large-area ionization chambers. ORDELA, Inc. also specializes in position-sensitive detection systems for x-rays and neutrons.

OUTREACH LABORATORY

311 North Aspen Ave
Broken Arrow, OK 74012

Contact: Ron Eidson, Laboratory Director

TEL: 918-251-2515
FAX: 918-251-0008

OUTREACH LABORATORY is a full service lab specializing in radiological analyses and the leading expert in lung solubility classification. OUTREACH offers high quality bioassay analyses with a rapid turnaround and low cost mobile lab services, consultation and radiochemistry training programs are also available. At OUTREACH, **Customer Satisfaction is always Guaranteed!**

OXFORD INSTRUMENTS, INC

Nuclear Measurements Group

601 Oak Ridge Turnpike

Oak Ridge, TN 37830

Contact: John Sonewald ext: 204

Lester Sideropoulos ext: 218

tel: 423-483-8405
fax: 423-483-5891
toll free: 800-769-3673
email: nmg@oxfordnm.usa.com

Oxford Instruments, Inc., Nuclear Measurements Group is a manufacturer of nuclear counting systems. Product lines include gamma and alpha spectroscopy systems, low level alpha and beta counting systems, NIM, and educational counters.

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Packard Instrument Company

800 Research Parkway
Meriden, CT 06450

tel: 203-238-2351

fax: 203-639-2172

web: <http://www.packardinst.com>

email: webmaster@packardinst.com

Packard Instrument Company, manufactures Tri-Carb® liquid scintillation counters; Cobra® gamma counters; Radiomatic® flow scintillation analyzers; TopCount® NXT microplate scintillation and luminescence counters; InstantImager® electronic autoradiography systems; Cyclone™ storage phosphor systems; MultiPROBE® robotic liquid handling systems; Discovery® homogeneous time-resolved fluorescence (HTRF®) microplate systems; FluoroCount™, LumiCount™ and SpectraCount™ - non-isotopic microplate counters; samples oxidizers; gas generators; biological reagents; and chemical and supplies.

Protean Instrument Corporation

PO Box 1008
Lenoir City, TN 3771
Contact: Phillip Cole

tel: 423-988-6911

fax: 423-988-6905

email: picsales@aol.com

Protean Instrument specializes in a complete line of alpha/beta counting instruments featuring thin window and windowless gas-flow proportional detectors. Products include low background models with automatic planchet sample changers, manual single-drawer/single-detector models, and multiple-drawer/multiple-detector models.

PULCIR, Incorporated

9209 Oak Ridge Hwy
Oak Ridge, TN 37830-3500
Contact: Joe Eddlenmon, Ray McPhillips, or Robert Poling

tel: 800-862-1390

fax: 423-927-6866

web: www.pulcir.com

e-mail: joe@pulcir.com

ray@pulcir.com

robert@pulcir.com

Pulcir, Incorporated is celebrating 30 years as **Manufacturers Representatives**. We represent the finest product lines in the **Radiation Detection** business. Our Line includes: **Ludlum Measurements** (portable and fixed monitoring & survey instruments), **American Nuclear Systems** (computer based MCA systems), **Bubble Technology** (field portable gamma spec instruments). Plus much more.

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Quanterra Richland Laboratory

2800 George Washington Way
Richland, WA 99352
Contact: Matt Lardy

tel: 509-375-3131
fax: 509-375-5590
email: lardym@quanterra.com

Cathy Knudsen
719 Pinellas Bayway #103
Tierra Verde, FL 33715

tel: 813-864-3118
fax: 813-864-3068
email: knudsec@quanterra.com

Quanterra-Richland has over 32 years experience in bioassay analyses for numerous commercial and government clients. On October 7, 1997, Quanterra-Richland became the first laboratory to successfully complete the DOELAP Radiobioassay Accreditation Process which applies to the required technical (including documentation) and administrative aspects of bioassay monitoring programs at DOE/DOD contractor facilities

QST Environmental Laboratories

PO Box 1703
Gainesville, FL 32602-1703
Contact: Paul C Geiszler, Associate Vice President, Manager Business Development/ Customer Services

tel: 352-332-3318
fax: 352-332-6622
email: pcgeiszler@qstmail.com
info@qstmail.com

Located in Gainesville, Florida, QST Environmental (formerly ESE) laboratories offer more than 30 years of experience and extensive full service analytical capabilities. QST is exceptionally qualified in the analysis of radiochemical, organics, inorganics, air toxics, high explosive/munitions in a variety of matrices including biota.

Thermo NUtech

5635 Jefferson Street NE
Albuquerque, New Mexico 87109

tel: 505-345-9931
fax: 505-761-5410

Once known as Eberline Instrument corporation, **Thermo NUtech** is a subsidiary of Thermo Remediation in the Thermo Electron family of companies. Thermo NUtech is a radiological services company that provides bioassay, radiochemical waste characterization, radiochemical analyses, health physics support services, dosimetry and innovative technologies to remediate radiologically contaminated sites.

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Tennessee Valley Authority
WAR 1A
PO Box 1010
Muscle Shoals, AL 35662-1010
Contact: William L Raines, Ph.D.

tel: 205-386-2536
fax: 205-386-2782
email: wlraines@tva.gov

TVA Nuclear Radiological Services provides repair and calibration of radiation survey instrumentation, external dosimetry processing and radioanalytical analyses including environmental, effluent and waste characterization. The combination of staff, facilities, and years of experience supporting the TVA nuclear program make TVA Nuclear Radiological Services an excellent partner for radiological support services.

**43rd Annual Conference on Bioassay, Analytical
and Environmental Radiochemistry
November 9-13, 1997**

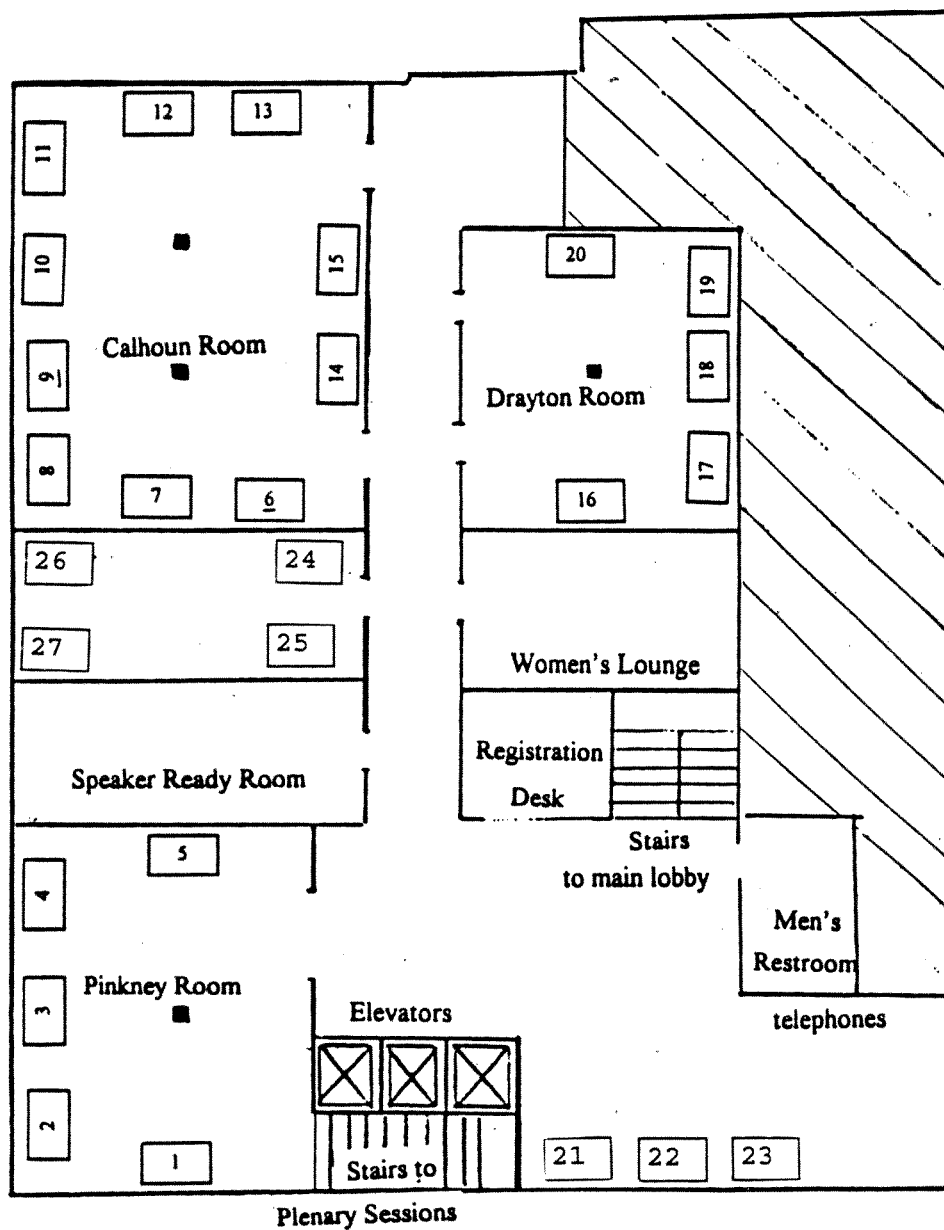
<u>VENDOR</u>	<u>BOOTH</u>
Analytics, Inc.	1
Environmental Physics, Inc.	2
Eichrom Industries	3
Thermo NUtech	4
EG&G ORTEC	5
Packard Instrument Company	6
Canberra Industries	7
Protean Instrument Corporation	8
Isotope Products Laboratories	9
3 M	10
CEM Corp.	11
Bioscan, Inc.	12
Ordela, Inc.	13
TVA Radiological Services	14
Environmental Express	15
Gamma Products, Inc.	16
Oxford Instruments, Inc.	17
QST Environmental	18
Chemchek Instruments	19
Aptec Nuclear, Inc.	20
Outreach Technologies, Inc.	21
Quanterra	22
Pulcir, Inc.	24
Nuclear Technology Services, Inc.	26
Nevada Technical Associates, Inc.	26
Barringer Laboratories	27

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<u>VENDOR</u>	<u>BOOTH</u>
3 M	10
Analytics, Inc.	1
Aptec Nuclear, Inc.	20
Barringer Laboratories	27
Bioscan, Inc.	12
Canberra Industries	7
CEM Corp.	11
Chemchek Instruments	19
EG&G ORTEC	5
Eichrom Industries	3
Environmental Physics, Inc.	2
Environmental Express	15
Gamma Products, Inc.	16
Isotope Products Laboratories	9
Nevada Technical Associates, Inc.	26
Nuclear Technology Services, Inc.	26
Ordela, Inc.	13
Outreach Technologies, Inc.	21
Oxford Instruments, Inc.	17
Packard Instrument Company	6
Protean Instrument Corporation	8
Pulcir, Inc.	24
QST Environmental	18
Quanterra	22
Thermo NUtech	4
TVA Radiological Services	14

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Vendor Exhibit Floor Plan



The stairway in the Pinkney Room leads to the Colonial Room in which the plenary sessions will be held. The Colonial Room is also accessible from the main lobby.

Booths 14 and 15 have no access to electrical outlets. All other booths do.

Sunday, November 9
Workshop Session 1
Colonial Room

Day/Time	Workshop Title/Presenter
Sunday	
8:00-5:00	<i>Conference Registration</i>
8:00-9:00	<i>Continental Breakfast served on the Mezzanine Level</i>
9:00-12:00	Ordela PERALS Workshop VII Wayne Graves
12:00-1:30	<i>Lunch On Your Own</i>
1:30-3:30	“State-of-the-art in Bioassay Measurements” Myint Thein
3:30-3:45	<i>Coffee Break</i> <i>Mezzanine Level</i>
3:45-5:30	“Linear Statistical Modeling” Ken Scrabel
6:00-9:30	<i>Reception at Environmental Physics, Inc.</i> <i>(Buses depart beginning at 5:30 from the Francis Marion)</i>

Workshop Session 2
Calhoun Room

Day/Time	Workshop Title/Presenter
Sunday	
1:30-3:30	Packard “New Applications for Environmental LSC”
3:30-3:45	<i>Coffee Break</i> <i>Mezzanine Level</i>
3:45-5:30	EG&E ORTEC “Laboratory Networks – Is Now the Time?”
6:00-9:30	<i>Reception at Environmental Physics, Inc.</i> <i>(Buses depart beginning at 5:30 from the Francis Marion)</i>

Monday, November 10
Workshop Session 3
Colonial Room

Day/Time	Workshop Title/Presenter
Monday	
7:30-5:00	<i>Conference Registration</i>
7:00-8:00	<i>Continental Breakfast served on the Mezzanine Level</i>
8:00-10:00	“DOE QA Program” Pam Greenlaw
10:00-10:15	<i>Coffee Break Mezzanine Level</i>
10:15-12:00	Eichrom Workshop “Radiochemical Separations using Extraction Chromatography”
12:00-1:15	<i>Lunch On Your Own</i>
1:15-3:00	Canberra Industries “Alpha Spectrometry”
3:00-3:15	<i>Coffee Break Mezzanine Level</i>
3:15-5:00	“NIST Rad Intercomparison Program” Chaun F. Wu
5:30-7:30	<i>Vendor Reception sponsored by Eichrom Industries Vendor Display Area</i>

Workshop Session 4
Calhoun Room (Morning)
Gold Room (Afternoon)

Day/Time	Workshop Title/Presenter
Monday	
7:30-5:00	<i>Conference Registration</i>
7:00-8:00	<i>Continental Breakfast served on the Mezzanine Level</i>
8:00-10:00	Oxford “New Technology in LL α/β Counting”
10:00-10:15	<i>Coffee Break Mezzanine Level</i>
10:15-12:00	“MDA and Detection Limits” M. Hotchandani/Rao
12:00-1:15	<i>Lunch On Your Own</i>
1:15-3:00	“DOE Mixed Waste Performance Evaluation Program (MAPEP)” Stan Morton
3:00-3:15	<i>Coffee Break Mezzanine Level</i>
3:15-5:00	3M Empore™ Rad Disks
5:30-7:30	<i>Vendor Reception sponsored by Eichrom Industries Vendor Display Area</i>

Tuesday, November 11
 Final Program: Session 1
 Keynote Address/Internal Dosimetry
 Chair: W. Burnett, Florida State University
 Colonial Room

Day/Time	Author/Co-Authors Affiliation	Title
Tuesday		
7:00-8:00	<i>Continental Breakfast</i> <i>Colonial Room</i>	
7:30-5:00	<i>Conference Registration</i> <i>Mezzanine Level</i>	
8:00-8:10	Heyward H. Coleman Environmental Physics, Inc.	Welcome to the 43rd Conference on Bioassay, Analytical, and Environmental Radiochemistry
8:10-8:20	Joseph P. Riley Mayor of Charleston	Welcome to Charleston, SC
8:20-9:00	Keynote Address: Prof. Ron Kathren Washington State University	Human Tissue Studies: The Ultimate Bioassay?
9:00-9:20	Judith Foulke and Daniel J. Strom DOE and Pacific Northwest National Laboratory	DOE's Proposed Standard for Internal Dosimetry
9:20-9:40	Son N. Nguyen Lawrence Livermore National Laboratory	The T.R.I.P. (Thyroid Radioiodine Intercomparison Program) Odyssey
9:40-10:00	R.E. Filipy, D.B. Stuit, S.E. Glover, S.P. Grytdal, R.H. Filby, R.L. Kathren, V.F. Khokhryakov, K.G. Suslova, E.E. Aladova, I.A. Orlova, and V.I. Chernikov U.S. Transuranium and Uranium Registry Dosimetry Registry of the Mayak Industrial Association	Radiochemical Comparison between the Dosimetry Registry of the Mayak Industrial Association (DRMIA) and the U.S. Transuranium and Uranium Registries (USTUR)
10:00-10:20	<i>Coffee Break</i> – <i>Vendor Display Area</i>	

Tuesday, November 11
 Final Program: Session 2
 Environmental Assessment
 Chair: Larry Robinson, Florida A&M University
 Colonial Room

Day/Time	Author/Co-Authors Affiliation	Title
Tuesday		
10:20-10:40	<u>Evgeny Kontar</u> and Bill Burnett P.P. Shirshov Institute of Oceanology (Moscow) and Florida State University	Fate of Chernobyl Radionuclides in Black Sea Sediments
10:40-11:00	<u>Carl T. Bishop</u> , J.R. Wise, J.M. Byrne, and P.A. Tetsuwari Fluor Daniel Fernald	Uranium in Airborne Particulates at Fernald Using "Dynaweb" Filters
11:00-11:20	<u>Greg Smith</u> , Mike Schultz, Bill Burnett, and Ken.G.W. Inn Florida State University and NIST	Optimization of a Sequential Extraction Method for Soils and Sediments: Development of the NIST Standard Sequential Extraction Protocol
11:20-11:40	G. Timothy Jannik Westinghouse Savannah River Company	Critical Radionuclide/Critical Pathway Analysis for the Savannah River Site
11:40-12:00	<u>Jon P. Martin</u> , K.J. Odell Magnox Electric Plc (UK)	Emergency Radiochemical Analysis Methodology and Performance
12:00-1:30	<i>Conference Luncheon Gold Room Invited Speaker: William Reinig</i>	<i>History of the Savannah River Site</i>

Tuesday, November 11
 Final Program: Session 3
 Naturally-Occurring Radionuclides
 Chair: Frank Kinard, College of Charleston
 Colonial Room

Day/Time	Author/Co-Authors Affiliation	Title
Tuesday		
1:30-1:50	J. Oliveira, <u>Barbara Mazzilli</u> , M.H.O. Sampa, and E. Bambalas Instituto de Pesquisas Energeticas e Nucleares (Brazil)	Determination of Natural Radioactivity in Public Water Supplies of the State of Sao Paulo
1:50-2:10	<u>Donna M. Beals</u> , Bill Winn, and Miles Denham Savannah River Technology Center	Analysis of the Ra-226/228 Isotope Ratio to Determine the Source of Elevated Radium in the Groundwaters Below an Old Coal Pile
2:10-2:30	<u>Michael G. Cantaloub</u> , J.F. Higginbotham, and L. Semprini Oregon State University	The Determination of Rn Partition Coefficients for Several Liquid Scintillation Cocktails
2:30-2:50	<u>Katherine M. Ellis</u> , Richard P.W. Nelson, John N. Smith, and Brad Moran Bedford Institute of Oceanography and University of Rhode Island	Evaluation of the "Challenger" Pump for Radionuclide Oceanographic Sample Collection
2:50-3:10	<u>T.L. Rucker</u> and C.M. Johnson Science Applications International Corporation	Calculation of Uranium Isotopic Activity Composition Based on Data from Various Assay Methods
3:10-3:30	<i>Coffee Break</i> <i>Vendor Display Area</i>	<i>Coffee Break Sponsored by</i> <i>Analytics</i>

Tuesday, November 11
 Final Program: Session 4
 In-Vivo Analyses/Radiation Protection
 Chair: Myint Thein, Oak Ridge National Laboratory
 Colonial Room

Day/Time	Author/Co-Authors Affiliation	Title
Tuesday		
3:30-3:50	Gary H. Kramer Canada Radiation Protection Bureau	Considerations in Assigning Dose Based on Uncertainties from In Vivo Counting
3:50-4:10	<u>Gary H. Kramer</u> , Barry Hauck, and Steve Allen Canada Radiation Protection Bureau and Cameco Corp.	Comparison of the LLNL and JAERI Torso Phantoms Using Four 70 mm Ge Detectors and Four Phoswich Detectors
4:10-4:30	<u>Gary H. Kramer</u> , Linda Burns, and Suzanne Yiu Canada Radiation Protection Bureau	Lung Counting: Evaluation of Uncertainties in Lung Burden Estimation Arising from a Heterogeneous Lung Deposition Using Monte Carlo Code Simulations
4:30-4:50	<u>N. A. Teasley</u> and L.D. Bible Oak Ridge National Laboratory	Twelve Years of Radiation Monitoring of Deer on the Oak Ridge Reservation (1985-Present)
4:50-5:10	<u>P. A. Scofield</u> and F.R. O'Donnell Oak Ridge National Laboratory	Individual and Collective Effective Dose Equivalents Associated with Consumption of Venison Obtained from Deer Hunts on the Oak Ridge Reservation
5:30-7:30	<i>Complimentary Entertainment Suite hosted by Nuclear Technology Services, Inc./Nevada Technical Association, Inc.</i>	<i>Please stop by the Nuclear Technology Services, Inc./Nevada Technical Association, Inc. booth for the Suite number</i>

Wednesday, November 12
 Final Program: Session 5
 Radioanalytical Method Development
 Chair: Brian Crandall, Westinghouse Savannah River Co.
 Colonial Room

Day/Time	Author/Co-Authors Affiliation	Title
Wednesday		
7:00-8:00	<i>Continental Breakfast Colonial Room</i>	
7:30-3:30	<i>Conference Registration Mezzanine Level</i>	
8:00-8:20	<u>D. R. Corbett</u> , Bill Burnett, and W.J. McCabe Florida State University and Geological and Nuclear Sciences, Ltd. (New Zealand)	Simple Technique for the Measurement of I-131 in Water Samples via NaI Detector
8:20-8:40	<u>Donna M. Beals</u> , Brian S. Crandall, Wanda G. Britt, Peter D. Fledderman, Joseph P. Dugan, and Brad K. Davis Westinghouse Savannah River Co. and Bechtel Savannah River Co.	Surface and Groundwater Analyses Using Solid Phase Extraction Disks
8:40-9:00	<u>Roger Wong</u> , Bill Burnett, Brian Crandall, and Sue B. Clark Florida State University, WSRC, and Washington State University	Development of an Improved Assay for the Determination of Gross Alpha and Beta Concentrations in Soil by Liquid Scintillation Counting
9:00-9:20	<u>S. Scarpitta</u> , J. Odin-McCabe, R. Gaschott, and A. Meir Brookhaven National Laboratory	Comparative Results of Four Sr-90 Groundwater Analytical Methods
9:20-9:40	Hewitt W. Jeter Teledyne Environmental Services	Gross Alpha/Beta Proportional Counting for Samples Having High Residue Mass
9:40-10:00	<i>Coffee Break Vendor Display Area</i>	

Wednesday, November 12
 Final Program: Session 6
 Extraction Chromatography/Separation Methods
 Chair: Michael Schultz, NIST and Florida State University
 Colonial Room

Day/Time	Author/Co-Authors Affiliation	Title
Wednesday		
10:00-10:20	<u>M. Rodriguez</u> , J.L. Gascon, and J.A. Suarez CIEMAT (Spain)	Study of the Interferences in the Determination of Pu, Am, and Cm in Radioactive Waste by Extraction Chromatography
10:20-10:40	<u>Peter H. Cable</u> and Bill Burnett QST Environmental Inc. and Florida State University	Analysis of Promethium-147 In Aqueous Samples
10:40-11:00	<u>Ray A. Sigg</u> , S.F. Peterson, and D.P. DiPrete Westinghouse Savannah River Company	Promethium Separations using Eichrom Ln Resin
11:00-11:20	R.A. Dewberry Savannah River Technology Company	Measurement of Ni-63 Content in Savannah River Site DWPF Glass Product by Ni-Selective Ion Exchange Purification and β - Counting
11:20-11:40	<u>Robert Langston</u> , Debra Madden, and Tracey Simpson Lawrence Livermore National Laboratory	The Determination of Curium in Fecal and Chelated Urine Samples
11:40-1:30	<i>Lunch</i> <i>On Your Own</i>	

Wednesday, November 12
 Final Program: Session 7
 Quality Assurance/Data Management/Statistics-1
 Chair: Mo Khalil, Westinghouse Savannah River Co.
 Colonial Room

Day/Time	Author/Co-Authors Affiliation	Title
Wednesday		
1:30-1:50	Conference Business Meeting Founder's Award Presentation	
1:50-2:10	W.E. Streets, <u>P.C. Lindahl</u> , J.J. Marr, K.J. Parish, A.E. Scandora, J.M. Copple, G.A. Anast, and J.R. Dahlgran ANL and RESL	Status of Implementation of DOE's Integrated Performance Evaluation Program (IPEP)
2:10-2:30	James R. Dahlgran, <u>P.C. Lindahl</u> , W.E. Streets, and W.R. Newberry RESL, ANL, and DOE	IPEP: The U.S. Department of Energy's Integrated Performance Evaluation Program; A Tool in a Total Quality System
2:30-2:50	<u>Michael K. Schultz</u> , Kenneth G.W. Inn, and J.M.R. Hutchinson National Institute of Standards and Technology	The NIST Radiochemistry Intercomparison Program NRIP: Traceability for Low-Level Radioanalytical Laboratories- Results of Year 1
2:50-3:10	<u>Mansour Akbarzadeh</u> , Chuan-Fu Wu, Steven Bakhtiar WIPP Laboratory	Radiochemical Methods and Intercomparison Programs Participation by WIPP Laboratories
3:10-3:30	<i>Coffee Break</i> <i>Vendor Display Area</i>	

Wednesday, November 12
 Final Program: Session 8
 Quality Assurance/Data Management/Statistics-2
 Chair: Donivan Porterfield, Los Alamos National Laboratory
 Colonial Room

Day/Time	Author/Co-Authors Affiliation	Title
Wednesday		
3:30-3:50	<u>Howard L. Hall</u> and Christine Choate Lawrence Livermore National Laboratory	WWW-Based Information Distribution in the Analytical Laboratory
3:50-4:10	P.Berard, F. Briot, D. Cavadore, L. Exmelin, R. Fottorino, <u>F. Nguyen</u> PROCORAD (France)	International Quality Controls in the Field of Radiotoxicological Bioassay
4:10-4:30	<u>Jon A. Broadway</u> , Donald A. Chambless, and Richard E. Malenfant International Corps on the Environment (ICE)	Assessment of Performance Testing Results in 1997 and Response to Laboratory Questionnaire
4:30-4:50	Thomas M. Semkow New York State Dept. Health	Is the Average of Detected Counts a Good Measure of the Dispersion of Radioactivity Measurements?
6:00-11:00	<i>Beach Party Citadel Beach House Sullivan's Island Buses Depart Beginning at 5:30pm</i>	

Thursday, November 13
 Final Program: Session 9 (Concurrent with Session 10)
 Bioassay/Environmental Analytical Techniques
 Chair: Robin Young, Westinghouse Savannah River Co.
 Calhoun Room

Day/Time	Author/Co-Authors Affiliation	Title
Thursday		
7:00-8:00	<i>Continental Breakfast Mezzanine Level</i>	
8:00-8:20	<u>J.G. Griggs</u> and MARLAP Workgroup Members EPA, DOE, NRC, DOD, NIST, others	Multiagency Radiation Laboratory Protocols (MARLAP) Manual
8:20-8:40	<u>Tansy L. Taylor</u> , Gary E. Grothaus, Rick Cummings U.S. DOE/ID	The Department of Energy Laboratory Accreditation Program for Radiobioassay
8:40-9:00	Donivan R. Porterfield Los Alamos National Laboratory	Assessment of Low-Level Plutonium in Urine QC Sample Results by Thermal Ionization Mass Spectrometry (TIMS)
9:00-9:20	Seth D. Shulman Bioscan, Inc.	A Compact Liquid Scintillation Counter for Benchtop and Field Use
9:20-9:40	<u>J. W. Collins</u> , S. Dunston, Angel D. Christman, MAJ Maguire, MD, and 1LT K. Guiberson USACHPPM, MHPP, OEMP, RCCCD	The U.S. Army Bioassay Program for Internally Deposited Radionuclides
9:40-10:00	<i>Coffee Break Mezzanine Level</i>	

Thursday, November 13
 Final Program: Session 10 (Concurrent with Session 9)
 Environmental Studies-1
 Chair: Barry Stewart, Environmental Physics, Inc.
 Pinkney Room

Day/Time	Author/Co-Authors Affiliation	Title
Thursday		
7:00-8:00	<i>Continental Breakfast Mezzanine Level</i>	
8:00-8:20	<u>Barbara M. Gillespie</u> , Gregory W. Patton, and Robert A. Kiddy Pacific Northwest National Laboratory	Iodine-129 in Onsite and Offsite Samples at Hanford
8:20-8:40	<u>John R. Meriwether</u> , Carey Hardaway, Wei-jenq Sheu, Joseph Sneddon, and James N. Beck University of Southwestern Louisiana, McNeese State University, and Nicholls State University	The Effect of Diagenetic Processes on the Radiochronology of Soft Sediments Using ²¹⁰ Pb and ¹³⁷ Cs
8:40-9:00	W.H. Carlton, <u>G.T. Jannik</u> , and A.A. Simpkins Westinghouse Savannah River Company	Radiological Impact of 1996 Operations at the Savannah River Site
9:00-9:20	I.L. Larsen, <u>F. Essien</u> , L.Robinson, and J. Weaver ORNL and Florida A&M Univ.	Radionuclide Distribution in Soils Periodically Treated with Municipal Sewage Sludge
9:20-9:40	Tim A. DeVol, <u>J.E. Roane</u> , and R.A. Fjeld Clemson University	Measurement of Radionuclides in Reactor Coolant Water by Ion Chromatography and On-Line/Off-Line Scintillation Counting
9:40-10:00	<i>Coffee Break Mezzanine Level</i>	

Thursday, November 13
 Final Program: Session 11 (Concurrent with Session 12)
 New/Improved Radioanalytical Techniques
 Chair: Donna Beals, Westinghouse Savannah River Co.
 Calhoun Room

Day/Time	Author/Co-Authors Affiliation	Title
Thursday		
10:00-10:20	<u>Donivan R. Porterfield</u> , George H. Brooks, Sammy R. Garcia, Yolanda I. Giles, Nancy L. Koski, and Bret L. Lockhart Los Alamos National Laboratory	A New Tool in the Evaluation of Gamma-Ray Spectral Analysis Software
10:20-10:40	P.N. Koch, <u>L. W. Hatcher</u> , and J.D. Batchelor Bechtel Nevada	Active Shielding Techniques Applied to Gamma Spectroscopy and Their Costs vs. Benefits
10:40-11:00	<u>Steven A. Kreek</u> , D. Beckedahl, J. Kammeraad, A. Friensehner, J. Blair, B. Payne, and A. Goldberger LLNL and Lockheed Martin	Real-Time Digital Signal Processing for HPGe Detectors
11:00-11:20	<u>Neil M. Barss</u> , R. Thomas Bell III, David E. McCurdy, Leenu E. Kuruvilla, and Kenneth G.W. Inn DOE, OIHP (EH-63), YAEL, NIST	²³⁹ Pu Intercomparison of ICP-MS, TIMS and FTA at μ Bq levels
11:20-11:40	<u>D.P. Diprete</u> , S.F. Peterson, and R.A. Sigg Westinghouse Savannah River Company	Gross Alpha Measurements using Extraction Chromatography in Conjunction with Pulse Shape Analysis on Savannah River Site High Activity Waste Solutions
11:40-12:00	<u>Zenon Pawlak</u> and Gabriela Kuswik-Rabiega Utah Department of Health	A Comparison of the Inductively Coupled Plasma Mass Spectroscopy /ICP/MS/ and Radiochemical Techniques of Total Uranium in Ground Water and Environmental Water Samples
12:00	End of Conference	

Thursday, November 13
 Final Program: Session 12 (Concurrent with Session 11)
 Environmental Studies-2
 Chair: Gary Kramer, Canada Radiation Protection Bureau
 Pinkney Room

Day/Time	Author/Co-Authors Affiliation	Title
Thursday		
10:00-10:20	<u>Walter Kubilius</u> , Brian Crandall, Terrence Killeen, and James Westmoreland Westinghouse Savannah River Company and Environmental Physics, Inc.	Causes of Radiological False Positives in Environmental Soil and Groundwater Data From Commercial Laboratories
10:20-10:40	Bahman Parsa NJ State Department of Health	Contribution of Short-Lived Radionuclides to Alpha-Particle Radioactivity in Drinking Water and Their Impact on the Safe Drinking Water Act Regulations
10:40-11:00	<u>R. Garcia</u> , R. Rosson, and B. Kahn Georgia Institute of Technology	Microwave-Assisted Decomposition of Environmental Samples Coupled to Classical Methods of Separation and Purification for the Analysis of ⁹⁰ Sr and ^{238,239} Pu
11:00-11:20	J.H. Aldstadt, K.A. Orlandini, L.L. Smith, K.M. Hoffmann, <u>D.C.</u> <u>Seely</u> , and I.R. Shaw-Epperson ANL, 3M Company, and Advance Possis, Inc.	A System for Rapid Water Sampling and Analysis Based on Empore Membranes and Solid Scintillation Spectrometry
11:20-11:40	Robert C. Hochel Westinghouse Savannah River Co.	Automated Radiological Scanning of Potentially Contaminated Railroad Crossties for Free-Release or Disposal
11:40	End of Conference	