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SCIENCE

AMERICAN ASSOCIATION FOR THE ADVANCEMENT OF SCIENCE

AAAS ANNUAL MEETING
Preconvention Issue

BIOSYSTEMS UPDATE

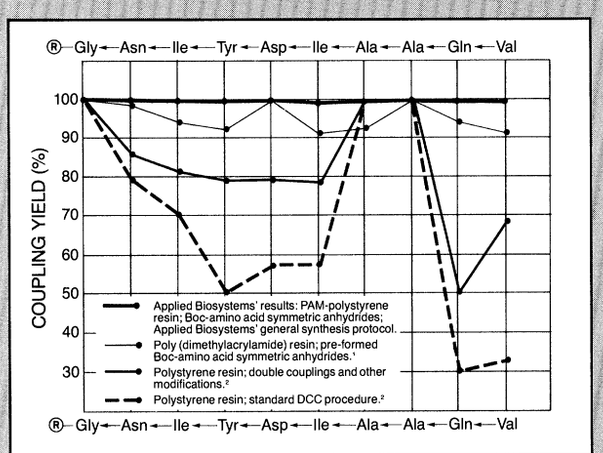
A New Approach to Automated Peptide Synthesis

Applied Biosystems is pleased to announce the first instrument designed for high efficiency peptide synthesis. The key to the high coupling yield of the Model 430A Peptide Synthesizer is an activation unit which converts the amino acid to a very efficient acylating species immediately prior to the coupling step. The defined protocol has been optimized for general peptide synthesis, but the fully programmable system allows straightforward adaptation to other chemistries.

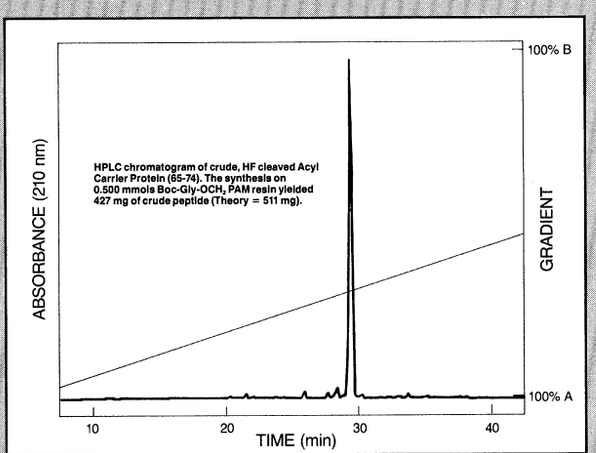
Cycle times with the general synthesis protocol are approximately one hour. A single loading of protected amino acids, reagents, and solvents will give up to 50 synthesis cycles. To insure high coupling yields, Applied Biosystems manufactures and supplies all synthesis reagents.

The data below summarize the results of the synthesis of the decapeptide Acyl Carrier Protein (65-74). These results illustrate the combined capabilities of the novel automated synthesis procedure and the high quality peptide synthesis reagents and loaded resins.

The new Model 430A Peptide Synthesizer is being introduced in the U.S. at FASEB and in Europe at Analytica. Write or phone if you'd like more information.



Amino acid incorporation during assembly of Acyl Carrier Protein residues 65-74.



Chromatography: Vydac C_4; A Buffer: 0.1% H_3PO_4/H_2O; B Buffer: 0.1% H_3PO_4/60% CH_3CN.

ANALYTICAL METHOD	STEP YIELD (%)									
Quantitative Ninhydrin Monitoring[3].	—	99.9	99.6	99.5	99.4	99.1	99.2	99.2	99.1	98.9
Preview Quantitation by Solid Phase Sequencing of Protected, Resin Bound Peptide[4].	—	99.4	—	99.3	99.1	99.2	—	98.9	98.7	—
	RELATIVE AMINO ACID EQUIVALENTS									
Amino Acid Analysis of HF Cleaved, Deprotected Peptide	1.00	0.97	0.90	0.94	0.97	0.90	0.96	0.96	0.94	0.98
Amino Acid Residue	Gly	Asn	Ile	Tyr	Asp	Ile	Ala	Ala	Gln	Val

Step yield quantitation and amino acid analysis results for Acyl Carrier Protein (65-74) chain assembly using Applied Biosystems' general synthesis protocol. Only single couplings were used throughout the synthesis (except for Gln).

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4. Stephen B.H. Kent, Mark Rieman, Mary LeDoux and R.B. Merrifield, *Proc. Int'l. Conference: Methods of Protein Sequence Analysis*, 1982

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AMERICAN ASSOCIATION FOR THE ADVANCEMENT OF SCIENCE

COVER

Aerial view of New York City, site of AAAS Annual Meeting, 24 to 29 May 1984. See page 1381 for details of the program of the Annual Meeting. [Courtesy of Port Authority of New York and New Jersey]

AC Plasma Display Manufacturing

To: Ted
From: Bill
Subject: IBM Technology

I've been reviewing some of our past and present technological achievements, and it occurred to me that the scientific, engineering, and academic communities might like to know more about them. Will you select a topic from the following list? Thanks.

- Vacuum tube digital multiplier
- IBM 603/604 calculators
- Selective Sequence Electronic Calculator (SSEC)
- Tape drive vacuum column
- Naval Ordnance Research Calculator (NORC)
- Input/output channel
- IBM 608 transistor calculator
- FORTRAN
- RAMAC and disks
- First automated transistor production
- Chain and train printers
- Input/Output Control System (IOCS)
- STRETCH computer
- "Selectric" typewriter
- SABRE airline reservation system
- Removable disk pack
- Virtual machine concept
- Hypertape
- System/360 compatible family
- Operating System/360
- Solid Logic Technology
- System/360 Model 67/Time-Sharing System
- One-transistor memory cell
- Cache memory
- Relational data base
- First all-monolithic main memory
- Thin-film recording head
- Floppy disk
- Tape group code recording
- Systems Network Architecture
- Federal cryptographic standard
- Laser/electrophotographic printer
- First 64K-bit chip mass production
- First E-beam direct-write chip production
- Thermal Conduction Module
- 288K-bit memory chip
- Robotic control language

Bill—
We have a great story to tell about our manufacturing innovations. The mass production of our large-screen plasma display is an excellent example.
Ted

Figure 1. *The IBM 3290 Information Panel uses alternating current (AC) plasma technology, making possible high information content and distortion-free images. The screen, which is 10.7 inches by 13.4 inches, can display up to 10,000 characters and can simultaneously display four applications from one or more computers. Its great versatility allows it to mix graphics, images, and text.*

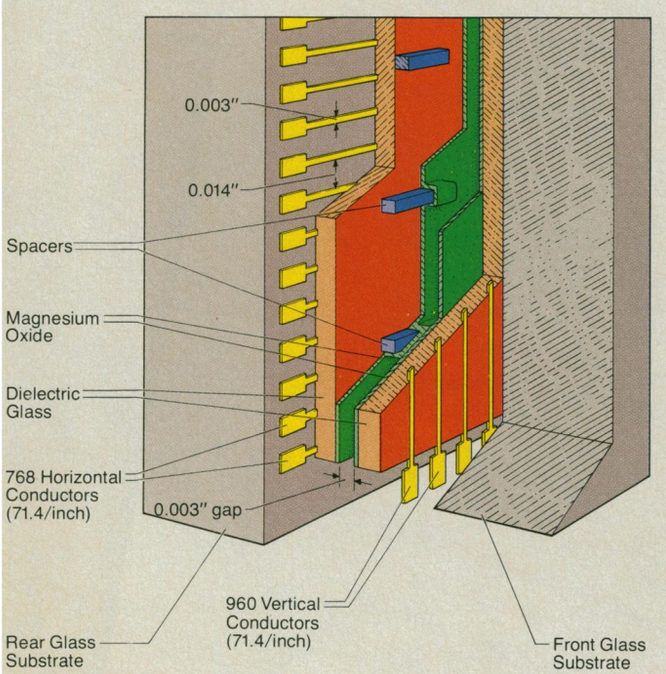


Figure 2. *This cross section of the plasma panel shows the narrow conductor lines on opposing glass substrates. Unique points on the panel can be ionized by applying low voltages to the appropriate horizontal and vertical conductors.*

Visual display terminals have had a profound impact on data processing. The IBM 3270 family of cathode ray tube (CRT) terminals has become widely accepted in the industry as a basic input/output device for mainframe computers.

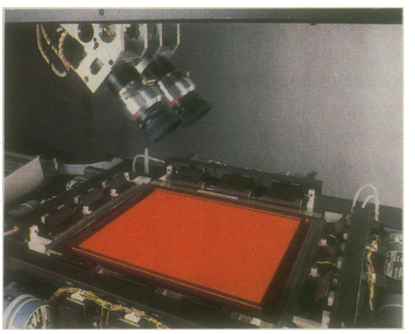
To display more data and to provide more advanced function without increasing space requirements, IBM has developed a new terminal using alternating current (AC) plasma display technology, invented at the University of Illinois. As a result of IBM's many manufacturing innovations, the IBM 3290 Information Panel, introduced in March 1983, is the industry's first mass-produced, large-screen plasma display terminal for commercial use.

HOW IT WORKS

In the IBM 3290, the plasma panel is a sealed sandwich of two glass plates: the rear plate is embedded with 768 parallel horizontal conductors and the front plate with 960 vertical conductors, thus forming a large grid. The narrow space separating the two plates is filled with inert neon-argon gas, which glows as electrical voltages are selectively applied to any of the over 700,000 intersections on the grid. This locally ionized gas, called a plasma, produces tiny dots of orange light. When combined in matrix patterns, these precisely located dots form images. Because this plasma technology operates

Figure 3. *The proximity printer shown here is one of many tools developed by IBM to mass-produce the AC plasma display panel. This machine automatically prints the hundreds of conductor lines on the glass plate by using highly collimated light to expose the conductor pattern through a mask. This projection printing system produces an excellent image and lowers the number of defects.*

Figure 4. *To assure consistently high quality in mass production, each AC plasma display panel is completely evaluated by this automatic tester developed by IBM. The tester has a camera system that scans and tests the patterns on each panel.*



in memory mode, the images do not have to be refreshed, eliminating any susceptibility to flicker.

MANUFACTURING INNOVATIONS

IBM manufacturing engineers had to find many answers to the challenges of mass-producing large-screen AC plasma panels. For example, special techniques were required to place 2,400 feet of very narrow conductors on each panel. To ensure high yields, engineers improved the method of photoprinting the conductor pattern and devised a way to repair open and shorted lines.

The large area of the new plasma display placed more stringent requirements on both the materials and processes used to fabricate the device. The panel—a composite of glass, metal, and thin-film oxide layers—is made by sequential thermal process steps, with each step conducted at a temperature suitably lower than the prior process step. To reduce material interactions, IBM developed lower-temperature dielectric glass and seal material.

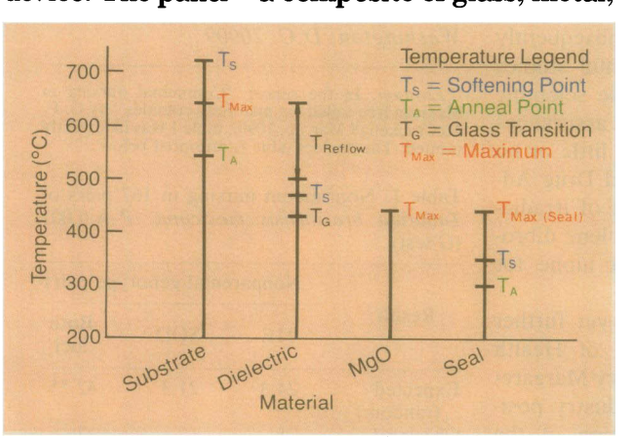


Figure 5. *To manufacture the AC plasma panel, IBM developed a lower-temperature dielectric glass and seal material to fit the thermal hierarchy requirements shown here.*

To maintain a uniform chamber gap between the sandwiched glass plates, engineers also developed a new metallic spacer technology. The spacers—about the thickness of a human hair and a quarter inch long—are automatically bonded by a tool that uses a laser to keep placement tolerances within several ten-thousandths of an inch. The metallic spacers are nearly invisible in an operating display and do not interfere with the ionization process.

Many engineers at IBM contributed to the innovations that enabled the mass production of the plasma panels used in the IBM 3290 Information Panel. Their contributions are only part of IBM's continuing commitment to research, development, and manufacturing.

IBM®

For free additional information on AC plasma display technology, please write: IBM Corporation, Dept. 31H/978D Neighborhood Road, Kingston, NY 12401

30 March 1984, Volume 223, Number 4643 **SCIENCE**

Education for an Age of Science

A report issued by President Dwight Eisenhower's Science Advisory Committee in 1959 had the title *Education for an Age of Science*. That report identified four tasks for the nation, and these tasks remain today:

- To build well-rounded curricula and in each subject to stress intellectual content,
- To recognize that teaching is a task of primary importance in modern society,
- To recognize that our society needs human talents of a wide variety and that it is essential that every individual be given the maximum opportunity to develop his or her particular talents to their utmost, and
- To understand that the advances of science and technology need special attention to the end that (a) all citizens of modern society acquire reasonable understanding of these subjects, and that (b) those with special talents in these fields have full opportunity to develop such talents.

Even before the report was released, the federal government had begun to provide substantial support to an unprecedented series of programs whereby the mathematics and science education available to highly gifted students improved dramatically. Yet, only this past September, the National Science Board's Coleman Commission, in a report entitled *Educating Americans for the 21st Century*, stated: "The Nation that dramatically and boldly led the world into the age of technology is failing to provide its own children with the intellectual tools needed for the 21st century." Similar conclusions were reached in reports by Secretary of Education Terrel H. Bell's Commission on Excellence in Education, the Education Commission of the States chaired by Governor James B. Hunt, Jr., of North Carolina, and the Carnegie Foundation for the Advancement of Teaching.

Why has the nation failed to meet the quarter-century-old imperative to devise an educational system that can provide our children with the tools needed in the 21st century? The answers to this question are complicated. But they all point to what the Coleman Commission referred to as a misperception by the American public that science should be left to the experts.

The first step in obtaining a public consensus for educational change is to convince ourselves that the task must be accomplished. We must also convince students—as well as their parents—that, in the words of the Coleman Commission, the " 'basics' of the 21st century include communication and higher problem-solving skills, and scientific and technological literacy—the *thinking* tools that allow us to understand the technological world around us."

The second step will be to convince ourselves that the Coleman Commission's objective of providing "mathematics, science and technology instruction that is the finest in the world" can be provided to all students. At the heart of this commission's report are a series of recommendations designed to achieve that objective. In view of the renewed interest in education at the grass-roots level and the leadership role being assumed by the governors of several states, there is a good chance that some of these recommendations will be carried out.

It will not be sufficient, however, to provide more and better mathematics and science courses. Rather, mathematics, science, and technology must become part of the very core of a liberal education. Money spent on education will be wasted in the long run unless we also alter public attitudes about what constitutes an adequate education in an age of science.

The centrality of science and technology to American life is now almost universally realized. Recognition of the importance of scientific and technological knowledge for all citizens is in our best national tradition, and it is essential for our future.—RICHARD C. ATKINSON, *chancellor of the University of California at San Diego, La Jolla 92093, is a former director of the National Science Foundation*

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Columbia University is now offering licenses for commercial development of pioneering genetic engineering techniques developed by Dr. Richard Axel and colleagues. Each license gives non-exclusive rights under the recently issued U.S. patent #4,399,216 on methods for introducing virtually any gene into cultures of animal and other eucaryotic cells. These cells can be used for the production of proteins, such as growth factors and viral proteins for vaccines, that cannot be produced efficiently, or at all, in bacterial cell cultures. Licenses also grant rights under three pending U.S. patent applications and all foreign applications.

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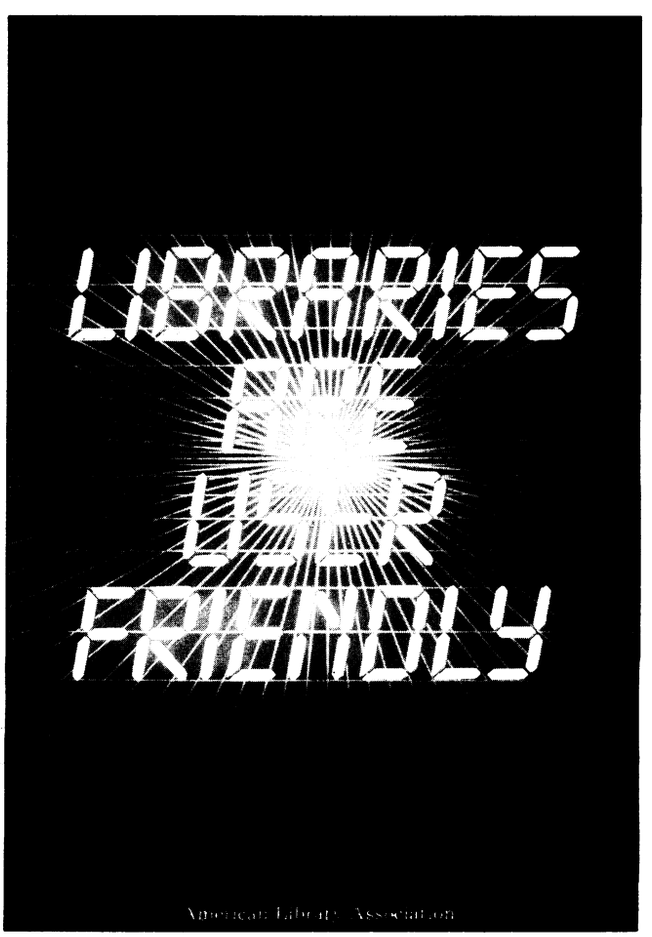

Tours and Special Events

General Information

Tours and special events are limited to meeting registrants only. To order tickets, please complete the form on page 1396 and mail it to the address indicated on the form. Since tours number 1, 10, and 19 take place partly in nonpublic areas, it is requested that all participants in these tours indicate their citizenship, in addition to name and address, in the space provided on the order form. Ticket orders received after 18 May 1984 will be held at the AAAS Ticket Desk at the New York Hilton Hotel.

Handicapped persons needing advance information or assistance should so indicate on the order form, or contact *Virginia Stern, AAAS Project on the Handicapped in Science, 1776 Massachusetts Avenue, NW, Washington, D.C. 20036 (telephone: 202-467-4497).*

Tour tickets: Prices include transportation and, where applicable, admission fees or meals. Tickets will be mailed before the Annual Meeting; they may be refunded for full value up to 24 hours before tour departure, but no refunds will be made after that time.

Show tickets: We will mail you vouchers, redeemable for show tickets at the AAAS Ticket Desk in the New York Hilton. Show tickets may be refunded for full value up to 48 hours before showtime; no refunds will be made after that time.

All tours depart from and return to the New York Hilton. Comfortable walking attire is recommended.

1. **IBM Thomas J. Watson Research Center.** Friday, 25 May, 9:00 a.m.–6:00 p.m. (Limit: 100 persons)

Areas of investigation at the Research Center include surfaces and thin films, materials, quantum physics and chemistry, and theory of computation. Advanced projects include semiconductor technology, system studies, software technology, design automation, office systems, and terminal technologies. There will be a general overview session and tours of the facility. Buffet luncheon, compliments of IBM.

2. **Subway Safari: Brooklyn Bridge/City Hall.** Friday, 25 May, 9:00 a.m.–Noon. (Limit: 30 persons)

From the Brooklyn side, stroll across the beautiful Brooklyn Bridge for a view of Manhattan; then stop at City Hall for a brief tour and visit with New York City officials.

3. **Subway Safari: Brooklyn Museum/Botanical Gardens.** Friday, 25 May, 1:00 p.m.–7:00 p.m. (Limit: 30 persons)

The Brooklyn Museum, seventh largest art museum in the United States, is known for its phenomenal Egyptian exhibit, pre-Columbian and African art, and much more. Brooklyn Botanical Gardens is known for its rose garden of over 5000 plants, the nation's finest Bonsai collection, a tropical rain forest, and more. The tour ends with a wine and cheese reception in the gardens.

4. **Subway Safari: New York Stock Exchange.** Friday, 25 May, 10:15 a.m.–1:00 p.m. (Limit: 20 persons)

An opportunity to learn about and view the extensive computerization employed to keep the NYSE's "big board" running, and to visit the floor of the exchange.

5. **David Letterman Show.** Friday, 25 May, 4:00 p.m.–7:00 p.m. (Limit: 49 persons)

Get a glimpse of the world of television as you become a member of the audience for a taping of this talk show.

6. **Subway Safari: *Intrepid* Museum.** Saturday, 26 May, 9:30 a.m.–1:00 p.m. (Limit: 25 persons)

Climb aboard the *Intrepid*, New York's museum on a ship, which presents 40 years of 20th-century history and technology. Tour includes the Technologies Hall and the U.S. Navy Hall.

7. Subway Safari: American Museum of Natural History/Hayden Planetarium. Saturday, 26 May, 1:00 p.m.–6:00 p.m. (Limit: 50 persons)

The largest museum of its kind in the world, its 38 permanent exhibition halls include *The World's People* and *The World's Creatures Great and Small*. Tour the high points of this world-renowned facility. Then stop at the Hayden Planetarium next door to see the spectacular show, *Starquest*, which traces the history of the space program.

8. Birdwalk in Central Park. Sunday, 27 May, 9:00 a.m.–11:00 a.m. (Limit: 20 persons)

Observe the many bird species found in Central Park, right in the heart of New York City, guided by a fellow AAAS member.

9. Subway Safari: South Street Seaport. Sunday, 27 May, 10:00 a.m.–1:00 p.m. (Limit: 30 persons)

This renovated area combines the old with the new: shopping, an eating emporium, a museum, and more. Browse through the area and buy brunch at one of the many restaurants.

10. West Point Military Academy—Hudson River Boat and Bus Tour. Sunday, 27 May, 9:00 a.m.–6:00 p.m. (Limit: 50 persons)

Guided by military personnel, visitors will see contemporary and historic sights: the chapel, the plain and mess hall, and Trophy Point where the great chain stretched across the river during the Revolution to bar enemy ships, as well as the museum that houses the largest collection of military memorabilia in the Western Hemisphere. Tour participants will then

---

Order Form for Tour and Show Tickets

Name _____

Institution or Company _____
(If part of mailing address)

Street Address _____

City _____ **State** _____ **Zip Code** _____

For tours 1, 10, and 19 indicate citizenship: _____

Indicate any special requirements due to a handicap: _____

Tour No.		Ticket Price	No. of Tickets
1.	IBM Thomas J. Watson Research Center (25 May)	$ 7.00	
2.	Brooklyn Bridge/City Hall (25 May)	3.00	
3.	Brooklyn Museum/Botanical Gardens (25 May)	11.00	
4.	New York Stock Exchange (25 May)	2.00	
5.	David Letterman Show (25 May)	2.00	
6.	*Intrepid* Museum (26 May)	7.00	
7.	American Museum of Natural History/Hayden Planetarium (26 May)	9.00	
8.	Birdwalk in Central Park (27 May)	Free	
9.	South Street Seaport (27 May)	2.00	
10.	West Point/Hudson River Boat and Bus Tour (27 May)	14.00	
11.	American Museum of Natural History/Hayden Planetarium (27 May)	$ 9.00	
12.	Broadway Musical: *42nd Street* (27 May)	20.00	
13.	Chinatown/Little Italy (27 May)	15.00	
14.	Lower East Side (28 May)	2.00	
15.	Soho (28 May)	3.00	
16.	New York Botanic Garden (28 May)	6.00	
17.	NBC/Rockefeller Center (28 May)	6.00	
18.	Broadway Musical: *Cats* (28 May)	30.00	
19.	AT&T Bell Laboratories (29 May)	7.00	
20.	Radio City Music Hall/St. Patrick's Cathedral (29 May)	6.00	

Charge to my ☐ VISA or ☐ MASTERCARD. Enclosed is my check ☐

Total amount enclosed or charged: $ _____

Total number of tickets ordered: $ _____

Account No. _____ Cardholder's Name _____

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MAIL TO: Tours, AAAS—Dept. R, 1515 Massachusetts Avenue, NW, Washington, D.C. 20005

cruise the Hudson River on the Academy superintendent's large boat, with lunch catered on board.

11. Subway Safari: American Museum of Natural History/ Hayden Planetarium. Sunday, 27 May, 1:00 p.m.–6:00 p.m. (Limit: 50 persons)

For details, see Tour No. 7.

12. Broadway Musical: *42nd Street.* Sunday, 27 May; Showtime: 2:00 p.m. (Limit: 50 persons)

One of Broadway's hottest musicals, guaranteed to keep your toes tapping. AAAS will send you a voucher; pick up your tickets at the AAAS Ticket Desk.

13. Subway Safari: Chinatown and Little Italy. Sunday, 27 May, 7:00 p.m.–Midnight. (Limit: 50 persons)

Guided by students from the Polytechnic Institute of New York, who are familiar with these ethnic neighborhoods, you will have dinner in Chinatown, then stroll over to Little Italy for dessert.

14. Subway Safari: Lower East Side. Monday, 28 May, 10:00 a.m.–Noon. (Limit: 30 persons)

Shopping for bargains? Intrigued by street vendors? Stroll through the Lower East Side for a visit to a New York tradition.

15. Subway Safari: Soho. Monday, 28 May, 10:00 a.m.–1:00 p.m. (Limit: 30 persons)

This area "south of Houston Street" is home to many artists' studios and galleries as well as quaint shops and restaurants. Experience New York's art scene by browsing through the galleries and speaking with the artists.

16. New York Botanic Garden. Monday, 28 May, 12:30 p.m.–4:30 p.m. (Limit: 30 persons)

Visit the Enid A. Haupt Conservatory, an acre of gardens under glass, containing 11 galleries and pavilions, each with a different plant environment. See also the Rose, Systematic, Chemurgic, and Herb Gardens and other exhibits.

17. Subway Safari: NBC and Rockefeller Center. Monday, 28 May, 12:30 p.m.–4:30 p.m. (Limit: 30 persons)

Led by professional guides, this tour will take you to the NBC TV studios and the famous Rockefeller Center.

18. Broadway Musical: *Cats.* Monday, 28 May; Showtime: 8:00 p.m. (Limit: 48 persons)

This award-winning show is the most exciting musical on Broadway today! AAAS will send you a voucher; pick up your tickets at the AAAS Ticket Desk.

19. AT&T Bell Laboratories. Tuesday, 29 May, 8:30 a.m.–1:00 p.m. (Limit: 100 persons)

The facility is located in Murray Hill, New Jersey, 1-hour's drive from midtown Manhattan. Here, at the birthplace of the transistor, advanced research and development is performed across a broad range of scientific and engineering disciplines important to information technology. After an introductory presentation, small groups will visit selected laboratories and see current work on very large scale integrated (VLSI) circuits, fiber optics, and recent developments in computer science research.

20. Subway Safari: Radio City Music Hall and St. Patrick's Cathedral. Tuesday, 29 May, 9:00 a.m.–1:00 p.m. (Limit: 30 persons)

Our final safari will take you to the majestic beauty of St. Patrick's Cathedral and the wonder of Radio City Music Hall—a great way to end a stay in New York City.

Annual Meeting
New York
24-29 May 1984

ADVANCE REGISTRATION
(B)

MAIL TO:
AAAS—DEPT. R
1515 Massachusetts Ave., N.W.
Washington, D.C. 20005

Name of Registrant: _____ (Last) _____ (First and Initial)

Name of Spouse Registrant: _____ (Last) _____ (First and Initial)

Institution/Company Name: (To be printed on badge)
_____ (Registrant)
_____ (Spouse Registrant)

Mailing Address: (For receipt of program(s), badge(s); and *Science* [for new applicants])
_____ (Street)
_____ (City) _____ (State) ☐☐☐☐☐ (Zip Code)

Convention Address: (Where you can be reached)
_____ (Hotel and/or Phone No.)
Check days attending: Thu ☐ Fri ☐ Sat ☐ Sun ☐ Mon ☐ Tue ☐

☐ **Please check here if you need special services due to a handicap. We will contact you prior to the meeting.**

Register Now and Save Money—On-site Registration Fees Will Be Higher

- Please check appropriate boxes, complete remainder of form (type or print), and **enclose payment or charge to credit card below.**
- Use separate form (photocopy) if you wish to submit additional registrations other than spouse's.
- Preconvention program, badge, and voucher for full program and abstracts will be mailed to registrants in mid April.
- **Registrations received after 11 May** will be held at the *Advance Registrants' Desk* at the New York Hilton Hotel.
- **Refund requests** for registration fees must be made by letter or telegram before 18 May 1984 and will be honored **after** the Annual Meeting. **No refunds are made on cancellation requests received after this date.**
- Special one-day attendance registration will be available at on-site registration desks only.

Registration Category	Regular		Student or Retired	
	Single	Double	Single	Double
☐ AAAS Member	☐ $43	☐ $ 58	☐ $24	☐ $39
☐ Non-Member:				
☐ Meeting registration only	☐ $53	☐ $ 68	☐ $24	☐ $39
☐ Register and join: Single membership	☐ $99	☐ $114	☐ $59	☐ $74
☐ Register and join: Double membership		☐ $131		☐ $91

Students: Fulltime undergraduate or graduate students only.

Double Membership (registrant and spouse) includes single subscription to *Science* (51 issues per year).

1984 Membership Dues: Regular Member, $56; Student or Emeritus, $35; Spouse or Emeritus without *Science*, $17.

Inquire for Canadian and other foreign rates.

Specify name(s) of new member(s) for single membership: _____

Charge to my ☐ VISA or ☐ MASTERCARD

Account No. _____ Expiration Date _____

Cardholder's Name _____ (Please print) Signature _____

SURVEY OF ATTENDANTS

Annual Meeting, New York, 24-29 May 1984

Your answers to the following questions will help us to plan future Annual Meetings. Please complete the form and either return it with your registration form or send it separately (to the same address) if you wish to respond anonymously (the two forms will be processed separately).

Principal Professional Interest
11 ☐ Physical, mathematical
12 ☐ Biological, medical
13 ☐ Engineering
14 ☐ Social, behavioral
15 ☐ Science policy
16 ☐ _____ (other)

Principal Professional Activity
21 ☐ Teaching, education
22 ☐ Health practice
23 ☐ Other practice, consulting
24 ☐ Research, development
25 ☐ Administration
26 ☐ _____ (other)

Institutional Affiliation Type
31 ☐ University, 4-year college
32 ☐ Other educational
33 ☐ Industrial, commercial
34 ☐ Other Private
35 ☐ Government
36 ☐ _____ (other)

Highest Educational Level
41 ☐ Doctoral Degree
42 ☐ Master's Degree
43 ☐ Other professional
44 ☐ Bachelor's Degree
45 ☐ _____ (other)

Age
51 ☐ Under 26 years
52 ☐ 26 to 35 years
53 ☐ 36 to 45 years
54 ☐ 46 to 55 years
55 ☐ 56 to 65 years
56 ☐ Over 65 years

Number of Past AAAS Meetings Attended
61 ☐ None
62 ☐ One
63 ☐ Two
64 ☐ Three
65 ☐ Four
66 ☐ Five or more

Distance Traveled to Meeting
71 ☐ Under 51 miles
72 ☐ 51 to 150 miles
73 ☐ 151 to 400 miles
74 ☐ 401 to 1000 miles
75 ☐ 1001 to 3000 miles
76 ☐ Over 3000 miles

MAIL TO:
AAAS Housing Dept.
New York Convention Bureau
2 Columbus Circle
New York, NY 10019

HOTEL RESERVATIONS

Annual Meeting
New York
24-29 May 1984

Send confirmation to:

Name _____ Street _____

City _____ State _____ Zip _____ Phone No. _____

Other occupants of room:

Name _____ Name _____

Choice of hotel: 1. _____ 2. _____

Room: ☐ Single ☐ Double ☐ Twin **Suite:** ☐ 1 Bedroom ☐ 2 Bedrooms **Preferred Rate:** $ _____

Please indicate special housing needs due to a handicap: ☐ Wheelchair accessible room.

Other _____

Arrival Date: _____ **Time:** _____ ☐ a.m. ☐ p.m.

Departure Date: _____ **Time:** _____ ☐ a.m. ☐ p.m.

(Be sure to list definite arrival and departure date and time. Reservations will be held only until 6 p.m. unless accompanied by 1 night's deposit.)

- All hotel reservations must be submitted to the AAAS Housing Department in writing **(use form above; type or print).**
- Reservations must be received by the Housing Department **not later than 1 May 1984;** reservations received after that date are conditional upon space availability at the hotels.
- Rooms are assigned on a first come, first served basis. If room rate requested is no longer available, the next available higher rate will be assigned.
- Confirmation will come directly from the hotel. All changes and cancellations must be made in writing (not by phone) through the AAAS Housing Department.

HOTEL RATES*

Hotel	Single	Double & Twin	Parlor + 1 Bedrm.	Parlor + 2 Bedrms.
The New York Hilton 1335 Avenue of the Americas *(No. of rooms blocked: 700)*	$76, 83, 90	$93, 100, 107	$250, 290	$400, 435
The Sheraton Centre 7th Avenue at 52nd Street *(No. of rooms blocked: 700)*	$65, 83, 88	$80, 98, 103	$250, 365, 395	$330, 445, 475

*Add 8.25% New York sales tax plus $2 per night occupancy tax.
Charge for extra person in room: New York Hilton, $17/night; Sheraton Centre, $20/night.
Children are accommodated free of charge in same room with parents: New York Hilton, no age limit; Sheraton Centre, age 17 and under.