FIFTEENTH BROOKHAVEN LECTURE

By A.O. ALLEN
CHEMISTRY DEPARTMENT

Title:
WET ELECTRONS -
THE RADIATION CHEMISTRY OF WATER

Lecture Hall, 8:00 p.m., Wed., March 14

A buffet supper ($2.75) will be served at the Brookhaven Center before the lecture, beginning at 6:00 p.m. Reservations should be made at least one day in advance by calling Ext. 2302 before 5:00 p.m., or Ext. 2453 in the evenings. Refreshments will be available in the Research Staff Lobby following the lecture.

MANY VISIT BERA ART SHOW

It is estimated that between 400 and 500 people visited the BERA Member's Art Show at the Exhibit Hall on site. The exhibition opened on February 14 and closed last Friday evening.

A COMPUTER LEARNS TO SEE

The Fourteenth Brookhaven Lecture, entitled, "A Computer Learns to See," was given by Dr. Paul Hough of the Physics Department on February 9. As the title of the lecture implies, ways and means were described to feed visually available information to a computer, analogous to the eye feeding information to the brain. The "thinking process" of modern digital computers, including magnetic core storage, binary system, etc., was illustrated by Dr. Hough. Information stored on photographic film, for instance, is transformed by means of a Flying Spot Digitizer, the "eye," into data that the computer can use. Here a very small spot of light produced mechanically by a fast-revolving disc scans the film. Bright and dark regions are located and corresponding electric signals are fed directly to the computer which is programmed, ideally, to interpret whole arrays of these signals. Applications to track measuring and fitting in bubble chamber pictures were discussed, the ultimate aim here being for computers to recognize and process various track patterns encountered in high energy physics.

NEW COMPUTER FACILITY

BEGINs OPERATION

The Applied Mathematics Division formally began operation of the Brookhaven IBM 7090 computer at 9:00 a.m. on Wednesday, February 21. Now, Brookhaven joins many of the other great research laboratories of the United States in having large electronic computer facilities available directly on the laboratory site.

Modern scientific research involves massive numerical and logical manipulations. Scientific investigation often requires complicated statistical analyses involving collecting and processing millions of data. Much of today's research would be impossible without such data processing facilities.

The Brookhaven IBM 7090 installation with its 1401 peripheral system is tailored to meet the demands of scientific research. The computer can remember 32,000 words in its high speed internal core store. Data is transferred into and from the internal memory on 18 magnetic tape transports. Special data channels allow the 7090 to proceed with calculations while the memory is taking in or transmitting data. The data processor can also draw pictures and make other pictorial displays with its cathode-ray tube attachment. Probably one of the most important special features of the device is the Direct Data Connection. Through this connection, the 7090 can serve as the controlling brain for automatized processes. The first of such systems, the Hough-Powell Device, completely removes the burden of bubble chamber film measurement from human operators.

Merely having one of the country's most advanced computation installations won't do much data processing. The 7090 solves problems only after these problems have been arranged in a program. The computer needs to know each step it must perform for the solution. The computer takes in directions and data and presents results under control of an internally stored monitor program. This monitor and the programming aid available from the Applied Math Division, and the IBM Library frees the researcher, who wants immediate solutions, from having to spend his life programming and pushing buttons. We can expect this combination of man and machines to be a significant supporting factor in tomorrow's scientific advancements.
THE BULLETIN BOARD

THEATRE GROUP NOTICE

The next meeting of the Theatre Group will be held on Wednesday, March 7 at 8:30 p.m. in the Recreation Building.

At previous meetings, great interest was stimulated in the following plays: "The Moon is Blue," "Dial M for Murder," and "Arms and the Man." We would like to have your vote for one of these for our next production. Suggestions from the floor will also be accepted for a production.

Remember — this is your group and your interest will keep it active. Come on out and give us your ideas and your vote for a production on March 7 at 8:30 p.m.

UPTON RIFLE—PISTOL CLUB

The monthly meeting of the Upton Rifle — Pistol Club will be held on Thursday, March 1, at the Recreation Center at 8:00 p.m. A movie, "Trick Shooting," will be shown.

The pistol shooters, members of the East End League, have finished their league activities for this year and will have a dinner meeting at the Suffolk Air Force Base on Tuesday, March 6.

KARL SCHRAG EXHIBIT

A collection of paintings, gouaches and drawings by Karl Schrag is on exhibit (to March 10) at the Kraushaar Galleries, 1055 Madison Avenue, New York City. Mr. Schrag was one of the artists represented in the collection of paintings and sculpture lent by the Kraushaar Galleries for the Third Annual Brookhaven Art Exhibit last November.

CHESS PROBLEM

In this week's problem it is Black's move and win. How? Answer elsewhere in this week's BULLETIN BOARD.

DUPLICATE BRIDGE

A duplicate bridge game will be held Thursday March 1 at 8:00 p.m. in the Rec. Hall. The next major event in the world of bridge at BNL in the Team-of-Four Tournament, to be held April 12. Organize your team now!

EN GUARDE

The Fencing Club is back in action and will meet every Wednesday in the Gym from 5:00 p.m. to 10:00 p.m. Expert instruction and fencing equipment are available. Everyone is welcome.

BERA FILM SERIES

OTHELLO

March 1
Lecture Hall 8:30 p.m.

As an actor, Orson Welles plays the tragic Moor with artistry and perception. As a director who understands William Shakespeare, Welles has produced a motion picture with taste and imagination. Desdemona is excellently portrayed by Suzanne Cloutier. Othello is a great classic and Welles has made it a great motion picture.

SKI CLUB TRIP

The next Ski Trip will take place on the weekend of March 10 and 11. The Club is planning to ski in Sugarbush Valley. A minimum of 25 people must sign up. The next club meeting will be held on Monday, March 5, 8:00 p.m. in the Recreation Hall. If anyone is interested in the trip, please call N. Ashton, Ext. 2532 or G. Raka, Ext. 310.

BROOKHAVEN DIVERS CLUB

At the last meeting of the Divers Club the 1962 officers were elected. Bob Young and Jean Lauer were re-elected President and Secretary-Treasurer respectively and Eric Forsyth was elected Vice-President.

The next meeting of the Divers Club will be held on Monday, March 5, at 7:30 p.m. at the Pool. There will be a showing of the new underwater color film, "Rendezvous in the Reef" plus practice time in the pool afterwards. All members are urged to attend. All guests are welcome.

For further information, contact Jean Lauer, Ext. 2390.

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BERA BUYS BOX SEATS
FOR NEW YORK METS
BASEBALL GAMES

BERA has recently purchased a box of four seats for the home games of the National League's new Baseball team, The New York Mets, at the Polo Grounds. By making our arrangements early, we were able to secure a choice location - box between home plate and third base. The seats were bought to provide another service to our employees by making the tickets for excellent seats available for sale right here at the Recreation Office.

Beginning March 1, orders for tickets (accompanied with cash) will be accepted for 38 playing dates which include opening game, all the night games, all the Sunday games and one holiday game. Tickets will be priced at $3.50 each.

Don't be disappointed! Don't wait until the last minute! Make your plans now! Purchase your tickets early for the date of your choice. We have only a limited supply which will be sold on a first come, first served basis.

Employees are urged to follow the "Ticket Practices" outlined below so that the box can be enjoyed by as many people as possible.

TICKET PRACTICES

1. The Recreation Office will be open for ticket sales and information Wednesday, Thursday and Friday, 1:00 p.m. to 5:00 p.m.
2. Tickets are intended for the employee and members of his immediate family. It is understood a single employee might wish to purchase an additional ticket for his or her escort.
3. Employees may purchase either 2 or 4 tickets.
4. Tickets will not be sold to any one employee for more than 2 games in advance.* An employee who has purchased tickets for 2 games in advance will be permitted to buy additional tickets only after he has attended at least one of his games. In other words, tickets will not be sold to anyone currently in possession of tickets for 2 unplayed games.
5. Tickets will not be returnable or accepted for refund unless the game is postponed or rained out.
6. If a game is rained out or postponed:
   a) Refund will be made at the Recreation Office upon presentation of ticket.
   b) Ticket holder may have preference on the rescheduled game if he requests same no later than one week after the cancellation.

*If there are tickets which have not been sold one week before game time they will be sold regardless of the number of tickets already in the purchasers possession.

TICKETS ON SALE MARCH 1 FOR GAMES LISTED BELOW
 Opening day - 23 nights - 13 Sundays - 1 Holiday

<table>
<thead>
<tr>
<th>Date</th>
<th>Opponent</th>
<th>Time</th>
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<tbody>
<tr>
<td>April 13</td>
<td>Pittsburgh, Friday</td>
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<tr>
<td>April 15</td>
<td>Pittsburgh, Doubleheader</td>
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<td>April 29</td>
<td>Philadelphia, Doubleheader</td>
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<td>May 1</td>
<td>Cincinnati, Tuesday</td>
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<td>May 11</td>
<td>Milwaukee, Friday</td>
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<tr>
<td>May 13</td>
<td>Milwaukee</td>
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<tr>
<td>May 15</td>
<td>Chicago, Tuesday</td>
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<td>May 30</td>
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<td>June 24</td>
<td>Houston, Doubleheader</td>
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<td>July 8</td>
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<tr>
<td>Sept. 23</td>
<td>Chicago</td>
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Opening day - 23 nights - 13 Sundays - 1 Holiday
BOWLING CONTINUED –

RED LEAGUE

Entering the final round the Red League standings and average handicaps indicate a close race.

<table>
<thead>
<tr>
<th>Won</th>
<th>Handicap</th>
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<tr>
<td>Utilities</td>
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<tr>
<td>Biology</td>
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<tr>
<td>Cosmos</td>
<td>45 1/2</td>
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<tr>
<td>H.P. Ins</td>
<td>44</td>
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<tr>
<td>Downunders</td>
<td>37</td>
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<tr>
<td>Ah So's</td>
<td>36</td>
</tr>
<tr>
<td>H.P. Outs</td>
<td>34</td>
</tr>
<tr>
<td>Mecca</td>
<td>33</td>
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</tbody>
</table>

According to "Dofester," the H.P. Outs are favored. Last week they rolled three games over 1000, lead by Caldwell, Champagne, and Faust all rolling 30 pins per game over their average. Ah So's were ready to give them their shirts. The Utilities with Connelly's 2291606 and Iarocci's 2091558 turned back Biology 4-0. Mecca with 100 pins advantage take on the Utilities next. So?

At the beginning of the evening Bud Pollock was given a triplicate award (132 three times). He was so overcome he couldn't talk so the league had a quiet evening.

SOLUTION TO CHESS PROBLEM

WHITE  BLACK
1. .................. 1. N on B5 to R4
  followed by          N to RR check
  Any move if         Etc. or 2R x N
  2N to Q2.          check.

POOL OPEN? YES!

TUESDAY - WEDNESDAY - FRIDAY
7:00 P.M. TO 10:00 P.M.
THURSDAY
5:00 P.M. TO 10:00 P.M.

FOR SALE

1960 CORVAIR 700 - 4 dr. sedan, 34,000 mi. stick shift. M. Greene, Ext. 770 or AT 6-0737
1956 FORD V8 - 4 dr., hardtop, blue & white, auto. trans., power steering, power brakes, good tires, new battery, new brakes. Steal at $395. SE 2-8830 after 5:30 p.m.
DUTCH COLONIAL HOUSE - Patchogue, 6 rooms, 3 bedrooms, 20' x 35' room., cypress paneled sunken din. rm., 2 baths, oil/hw heat, 60' by 183' plot with beau. shade trees, 2-car garage. Close to village, low taxes. L. Van Kollem, Ext. 445.
HOUSE - Contemporary ranch, 100' x 160' plot, aluminum storm windows & doors, blk. top driveway, full cellar, hot water heat, gutters & leaders, 3 bedrooms, 6 rooms total. Screened porch. $4000 and you take the mortgage. If interested call E. Heins, Ext. 464 or AT 1-7469 after 6:00 p.m.
REVCO FREEZER - Chest type, 15 cu. ft. cap. Excell. cond. $150. YA 4-6790.
BRIDGE LESSONS - At practically no cost. So you don't know an ace from a deuce? It doesn't matter! Learn to play bridge by taking some easy lessons one night a week. Dates and times to be arranged. Call Sandy Wagner, Bridge Club Chairman, on Ext 418

SPEAKERS - 2 Lafayette SK 128, 8 in. speakers in mahogany satellite enclosures. (Size: 14 in. w, 10 1/2 in. h, 7 1/2 in. d.) Great for wall of party room. G. Black, Ext. 628.

FOR RENT

APARTMENT - 3 1/2 rooms in Patchogue Garden Apartments for sub-lease from May, 1962 until Dec. 31, 1962. Rent is $95/mo. After that you may lease from landlord. GR 5-1744 after 6:00 p.m.
HOUSE - To rent or buy, Bellport-Brookhaven village area, three or more bedrooms. V. Spinrad, Ext. 503.

WANTED

SNOW TIRES - Good cond. Size 760 15. Ext. 604 or 2410.
HOUSE - Unfurnished, 2 bedrooms, located in Riverhead School District. Ext. 2112 or JA 2-4892.
CAMPING EQUIPMENT - 1 drop or fly sheet. 2 sleeping bag covers and/or bed comforters or blankets. Ext. 2351.
PICNIC MOVIES - To borrow. Have you taken home movies of any of our Operation Get-Together's? If so, we'd appreciate borrowing them for a short while. Please call George Sabine, Rec. Office, Ext. 391.
STRING BASS - In good cond. Also, tenor banjo. Reasonable. G. Loesch, Ext. 476.

LOST & FOUND

WOOL HAT - Maroon scarf, 2 plaid scarfs. Found at Lecture Hall. Personnel Services, Ext. 2107.