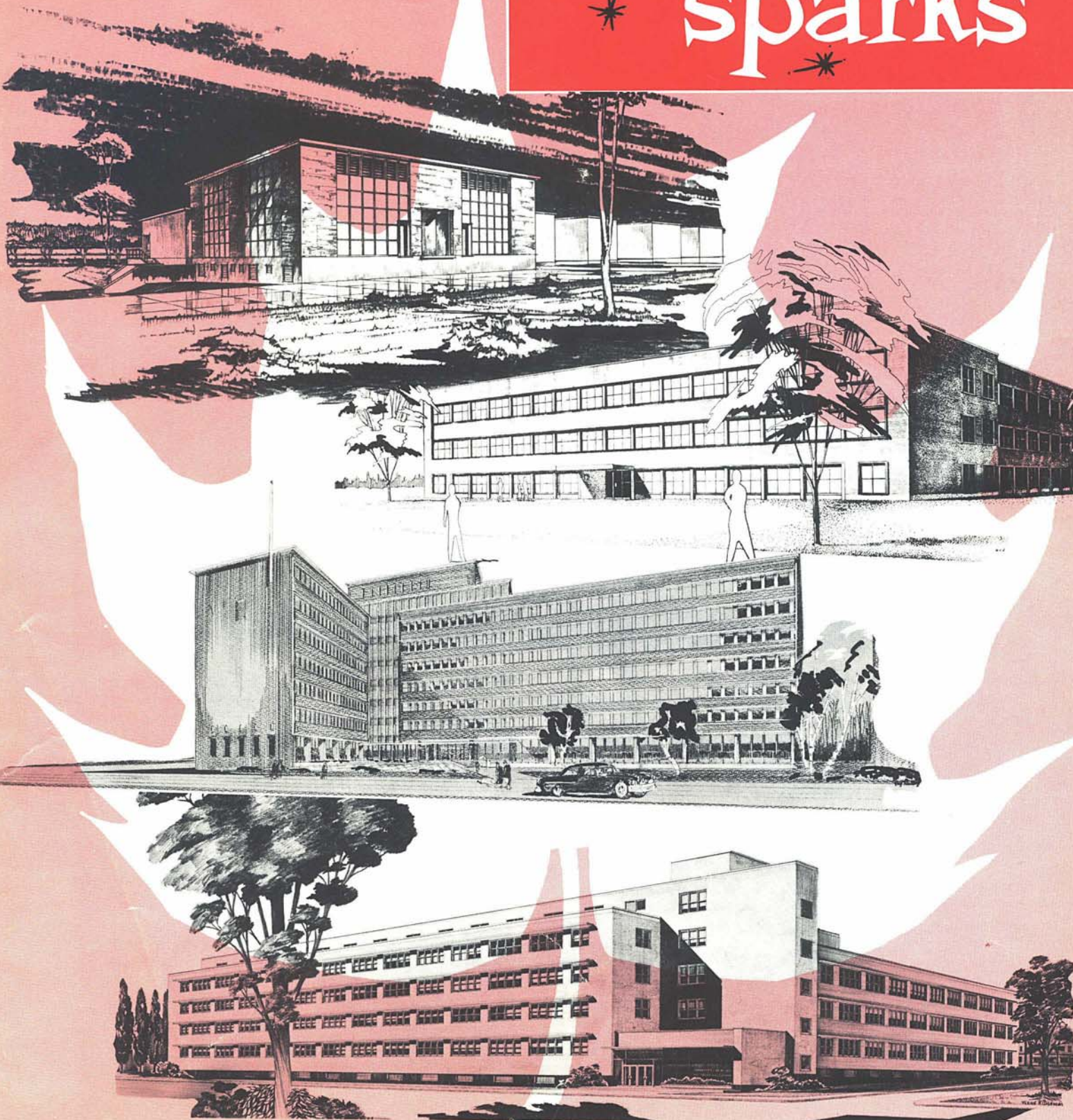


VOL. 6 No. 3

arcs and sparks



SCIENTIFIC PROGRESS IN OTTAWA

NOW Vacuum-cup Electrodes!



Vacuum-cup Electrodes!



Laboratory work has indicated these electrodes may be excited with a dc arc; spark-ignited, low-voltage ac arc; uni-directional arc; and, high voltage ac spark.

Free Evaluation Samples and Specifications

was introduced to give greater flexibility. Both of these have Teflon cups.

For full details, specifications and evaluation samples of these vacuum-cup electrodes, write on your letterhead.

UNITED

carbon products co.



MODERN CITY HALL reflects the surging spirit of new growth and progress in Ottawa, the host city for the Seventh Annual Symposium on Applied Spectroscopy.

SEVENTH OTTAWA SYMPOSIUM SETS RECORDS

PEACE TOWER, rising high above the Parliamentary Buildings, stands as an impressive symbol that will always be Ottawa.



On October 3, 4, 5, 1960, the Seventh Ottawa Symposium on Applied Spectroscopy set records not only in attendance but also in a feeling of enthusiasm concerning the remarkable progress of spectroscopy in Canada.

Since the first two-day Symposium on Applied Spectroscopy, conceived in the minds of Dr. J. K. Hurwitz, J. C. Bartlet, W. A. Champ, and W. M. Gray, and held in September, 1954 . . . the Canadian Association for Applied Spectroscopy has come a long way. And, its purposes have been well served: (1) to contribute to the advancement of applied spectroscopy; (2) to increase the individual's knowledge of spectroscopy.

During the period in which progress toward a Canadian Association of Spectroscopists was being made, Jack Hurwitz, had also been expanding his activities in another direction. Inspired by the shortage of spectrographic standards for copper base alloys, he had organized a committee for the purpose of producing and certifying standards for the spectrographic analysis of copper and copper alloys. The work of this committee was discussed and recognized as a desirable activity for the new society. This work has now expanded into non-metallic standards. It is noteworthy to comment, at this point, that this is the only group in Canada that has made an effort to set up spectrographic standards.

During 1955-57 the C.A.A.S. continued its slow, steady growth. Built on a solid foundation, its success was assured and



DISTINGUISHED OFFICERS obliged with a handsome group picture (l. to r.): E. G. Herbert, New C.A.A.S. Vice President, Algoma Steel W. J. Bennett, new C.A.A.S. President, Northern Electric Company Ltd.; Dr. A. D. Dunton, dinner speaker, President of Carleton University, Ottawa; W. J. Forsyth, outgoing C.A.A.S. President, Aluminum Laboratories, Limited, Arvida; L. R. Pittwell, new C.A.A.S. Secretary-Treasurer, Dominion Magnesium.

early in 1957 it was incorporated as a non-profit organization. On March 7th, the executives met in Pittsburgh with Dr. E. K. Jaycox present, representing the then new Federation of Spectroscopic Societies. The C.A.A.S. agreed on cooperation with the Federation, the aims of which were very much the same. As a consequence, the C.A.A.S. is the oldest federated group in North America.

Presently, there exists four major groups in the C.A.A.S.: Arvida, Montreal, Ottawa, and Toronto-Hamilton. The following are the newly elected officers of the Local Sections for 1960-1961: Arvida, R. V. Baker, G. T. Day; Montreal, W. J. Bennett, R. A. Burley, A. W. Pross; Ottawa, S. Berman, T. W. Davis, R. Lauzon; Toronto-Hamilton, E. W. Warren, Ed Zapotichny, R. G. Archer. Also, the following are members-at-large: L. R. Pittwell, R. W. Laugille, and E. G. Herbert.

Since this time, progress has been unabated as indicated by an attendance this year of between 155-175 official registrants versus the 120-130 of last year. As the association forges forward, its next major goal might well be participation in the formation of an international union of Spectroscopists. Additional thoughts on this subject are to be written in the near future by members of the group.

This year's Symposium was doubly notable in first, that a full-day program of infra-red spectroscopy was co-sponsored by the Coblenz Society and second, the symposium was held in handsome Camell Hall through cooperation with Mr. K. M. PACK, Chief Administrative Officer, Department of Mines and Technical Surveys. A notable program of some thirty-two papers, generating new degrees of enthusiasm, was to the credit of the Programme Committee:

Chairman: Coblenz Society; W. J. Potts, Dow Chemical Company, Midland, Michigan C.A.A.S.; C. R. Langdon, Aluminum Company of Canada, Arvida

Members: R. H. Black, W. J. Forsyth, L. Girolami, P. E. Lemieux, Aluminum Laboratories, Ltd., Arvida, T. J. Hudson, Aluminum Company of Canada, Arvida, F. A. Miller, Coblenz Society, Mellon Institute, Pittsburgh

Additionally, much praise should be directed to the Ottawa Arrangements Committee:

Chairman: T. W. Davis, Food & Drug Directorate, Ottawa
Members: Dr. S. Berman, National Research Council, Ottawa
D. S. Russell, National Research Council, Ottawa
R. Lauzon, National Research Council, Ottawa
Mrs. E. Maziec, Spartan Air Services Ltd., Ottawa
J. C. Bartlett, Food & Drug Directorate, Ottawa

There were many highpoints in this year's Symposium. Memorable among these was the delightful Social Hour preceding the Annual Symposium Dinner, Tuesday evening, October 4th:



NO COFFEE, but a little relaxation, is this group's motto between papers, (l. to r.) W. J. Bennett, new C.A.A.S. President, Northern Electric Co., Ltd.; Wylie Taylor, Department of Mines, Toronto; Tom Schreiber, General Motors Research Labs.; Bill O'Neill, Ethyl Corporation.

A REFRESHING SCENE, during one of the much appreciated coffee breaks, is (l. to r.) G. Zotov, Atomic Energy of Canada, Ltd.; W. J. Wright, Noranda Copper & Brass Ltd.; D. R. Jackson, Canadian National Railway; Schier Berman, National Research Council, Ottawa.

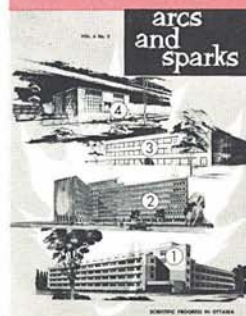


The dinner itself was doubly enjoyed for both excellent food and the guest speaker, Dr. A. D. DUNTON, President of Carleton University, Ottawa, who spoke on "Canadian Science Spectrum" . . . which proved to be a learned insight on the progress and character of Scientific Research and Education in Canada.

The unusually fine atmosphere of the accommodations at the Chateau Laurier Hotel, the fascinating tours through the new building of the Department of Mines and Technical Surveys and the Dominion Observatory, plus the general progressive feeling of growth and expansion at this Seventh Ottawa Symposium will be remembered for years to come.

COVER STORY

It is a singular honor for *Arcs & Sparks* to have, as its first "full cover" edition, a montage of buildings indicating the scientific progress occurring in that wonderful Canadian city of Ottawa. By way of explanation we would like to briefly describe the buildings shown:



(1) New Chemical Laboratory Building for the Department of Mines & Technical Surveys.

(2) Eight story Geological-Geographical Surveys Building, Department of Mines & Technical Surveys.

(3) New Testing Laboratory Division building of the Federal Department of Public Works.

(4) Experimental Plant Growth Building at the Central Experimental Farm, Ottawa.

Also featured in this issue, on page 11, is "Canadian Capers" —don't miss it!



STATE CAPITOL might be "old stuff" to Denverites, but gave a thrill to out-of-towners at the 3rd Rocky Mountain Conference.

Rocky Mountain Holds Outstanding Conference

One year ago, Arcs & Sparks reported that "the Colorado group is well on their way to a vital, enthusiastic organization." Today, in the light of their 3rd Annual Conference, held August 8-9, 1960 in Denver, Colorado, this prophecy has been amply fulfilled. The "miler-highers" held a conference outstanding in both quality of program and quantity of regional spectrographers present.

Growing year by year, this 3rd Annual Conference had very close to 100 registrants in attendance, setting a new record. Representing spectrography, all the way from California to Pennsylvania, they crammed the two days of August 8 and 9 with well-delivered papers, thought-provoking question sessions, and delightfully-different social activities. It was agreed that there's "something" about that Denver air that's extra stimulating.

From registration at 9:00 A.M. Monday until about 5:00 P.M. that afternoon, the registrants wore their "thinking caps" . . . and were well rewarded by a variety of top quality papers. The distinctive, and delightful social hour beside the swimming pool of the Park Lane Hotel proved to be a marvelous "unwinding" for everyone. This was followed by a sumptuous dinner in the Starlite Room and a scintillating address by the guest speaker, Dr. L. R. McGill, Bureau of Standards, Boulder, Colorado, entitled "High Altitude Infrared Spectroscopy From Balloons."

The following day, Tuesday, August 9, was characterized by a morning filled with interesting papers plus an unusual afternoon session devoted to Open Panel Discussions on both X-Ray and Emission Spectrography. Continued growth and solid success is certainly in the future of the Rocky Mountain Section of the SAS. Present officers are:

President:

Edward Vejvoda, Dow Chemical Company, Denver, Colorado

Vice President:

N. Cyril Schieltz, School of Mines, Golden, Colorado

Secretary:

Fred N. Ward, U. S. Geological Survey, Denver, Colorado

Treasurer:

Peter Yin, Shell Chemical Corporation, Denver, Colorado

Also, our hats are off to the ace-high job done by the 1960 Conference Committee which included:

Co-Chairmen:

C. W. Gullikson, Ohio Oil Company, Littleton, Colorado

A. L. Schalge, Merlyn Salmon, Fluo-X-Spex Laboratories, Denver, Colorado

Al P. Marranzino, U. S. Geological Survey, Denver, Colorado

Everyone agreed that, certainly, the 3rd Annual Conference was "one for the books" . . . to be exceeded only by the 4th coming up in '61.

ALL SMILES up in the marvelous dining room, despite their preoccupation with conference duties are Co-Chairman Dr. C. W. Gullikson and President Edward Vejvoda.

BULL SESSION aftermath, typical of the serious business at hand, occupies William W. Miles, A. T. Meyers, and Art Chodas.

HARD WORKING, Co-Chairman of the Conference, Dr. Alvin L. Schalge is shown, concentrating intensely on a problem which he seems to have well in hand.



— *Labora-story* —

OF THE MONTH

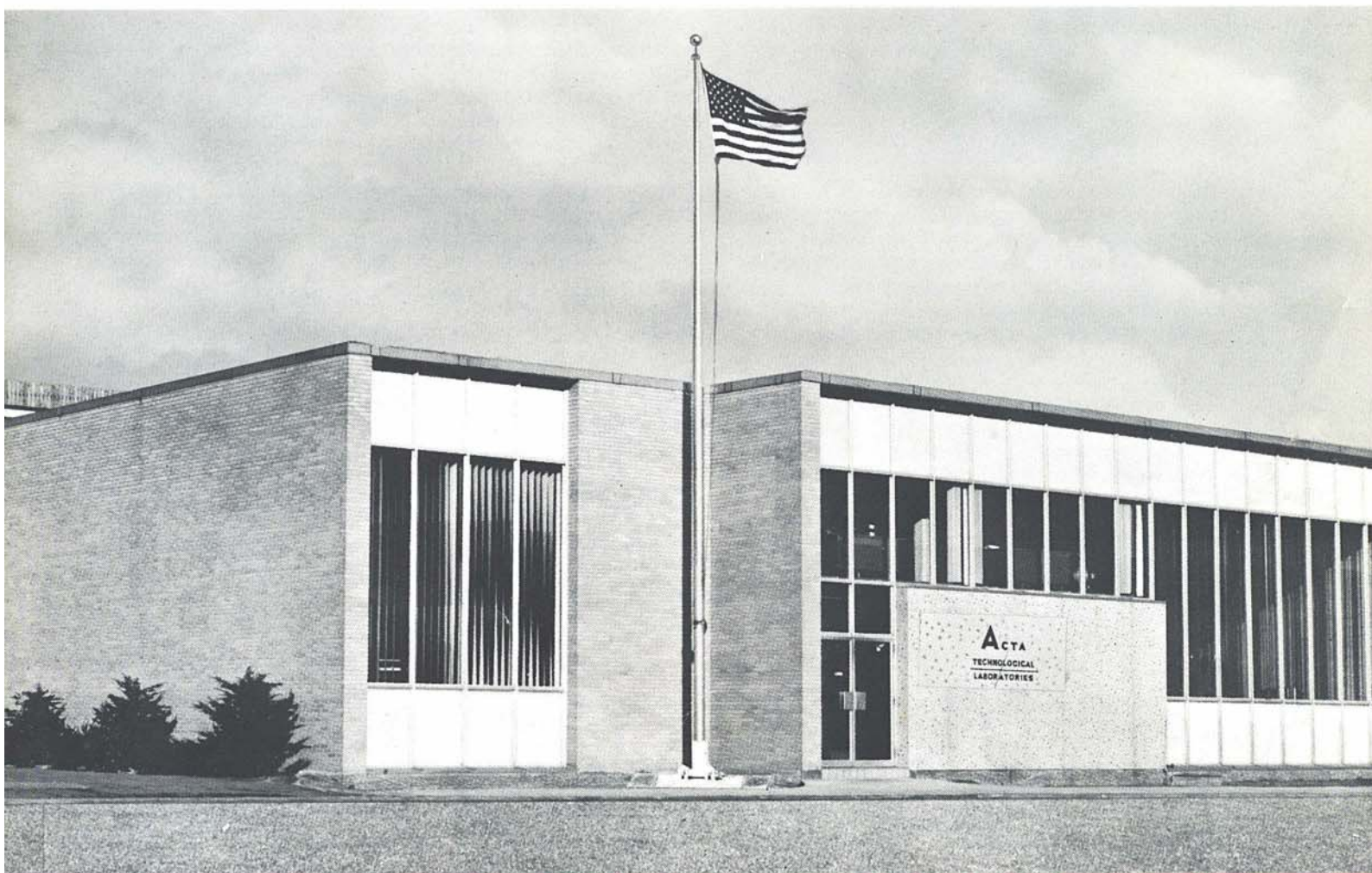
Acta Technological Laboratories

The handsome conversation-starting building of Acta Technological Laboratories is an emblem of spectrographic progress gracing the Chicago scene. Inside its beautifully proportioned walls of brick, glass and metal some of the finest analytical work in the country goes on 16 hours every day.

President Michael "Mike" Pallatto, the guiding force behind this growth story, enthusiastically looks forward to a future of even greater opportunities for expansion. He forcefully states that Acta is capable of performing any number of spectrographic analyses . . . plus additional abilities that run from the taking of a simple measurement . . . to determining the culpable cause of failure of a component . . . to the most time con-

suming basic research project. "Mike" Pallatto is justly proud of the high caliber and reputations of the men who make Acta . . . professional chemists, physicists, engineers, metallurgists, mycologists with their staffs of qualified technicians.

Founded in 1946, as Steel City Testing and Engineering Laboratories, the company enjoyed a steady growth. Its efforts became so ramified that the implications of a limited operation specializing in metallurgy dictated a change to the present name of Acta Technological Laboratories. Needless to say, the latin derivation of the word "Acta" is defined as acting or performing . . . so Mike Pallatto states, "We have to perform . . . it's in our name!"



ARCHITECTURAL BEAUTY of the highest order is evident in the striking appearance of the Acta Technological Laboratories, located on a five acre tract some 20 miles southeast of the Chicago Loop.

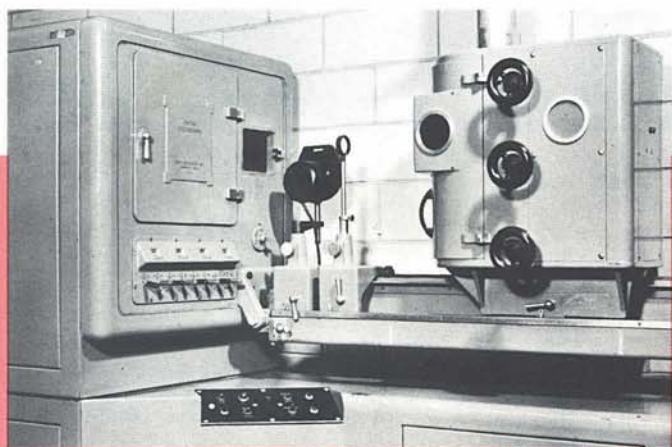
The Chemistry-Spectrometry facility at Acta has reached the "age of automation" with an imposing array of fine instrumentation. Requiring accurate analyses at almost any hour of the day, with a demand for almost "instantaneous" results, Acta found the answer in equipment properly selected and highly skilled personnel . . . both accustomed to heavy responsibilities. To indicate the scope of spectrography at Acta, a partial list of materials analyzed entails ferrous and non-ferrous metals, paints, refractories, ores, cements, coal, fuel, lubricating oils, animal fats, plastics, bituminous materials and water.

Instrumentation in the Chemistry-Spectrometry facility includes key instruments such as the 3-Meter Baird Emission Spectrograph; the 3-Meter Baird "Direct Reader" Spectrometer and the General Electric XRDS X-Ray Spectrometer to put the inorganic analysis of metals on an expedient footing in step with the present impetus of the space age. Acta believes this instrumentation allows them the highest degree of precision in the determination of alloying and minor elements which can be reported and certified within an hour after receipt. In addition, to widen the range of their organic analysis, Acta employs A Perkin-Elmer Model 221 Automatic Recording Double Beam Infra-Red Spectrophotometer. To handle other work, the facilities also include a well-equipped, compre-

hensive wet chemistry laboratory.

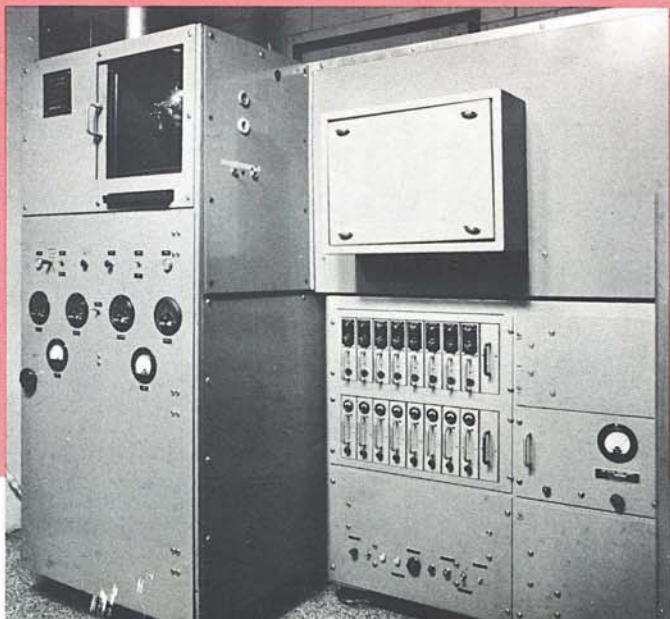
Perhaps the most telling quality employed by Acta is the type and caliber of personnel. Fine screening of technical specialists—from top chemists to lab assistants—has been credited with Acta's widespread reputation. Today, fourteen years after the organization was founded, it has achieved recognition as the largest independent commercial testing laboratory in the middle west. Its integrated departments have reached a stage where they can accomplish all the requirements of industry and the military forces in the evaluation and testing of materials, components and systems.

It is particularly significant that Acta Technological Laboratories, in their Chemistry-Spectrometry facility find wide and continuous use of United products. Of special interest is an accelerated need for United's Carbon Electrodes and Carbon Powder in the analysis of diesel oil. Other types of electrodes are used in the semi-quantitative analysis of ores, slags and rock materials . . . also in trace elements of all steels. This work has been accomplished for many industries—notably big foundries and big aircraft. Acta works for clients from Connecticut to California . . . Minnesota to Fort Worth and Dallas . . . establishing new recognition for its complete services and also the inherent analytical values of spectrography.



HARD WORKING three meter Baird Spectrograph is used daily at the Acta Technological Laboratories . . . finds heavy usage in the analysis of diesel oils.

TWO SHIFTS daily, working a full 16 hours are necessary to keep up with the work on this modern Baird direct reader shown in Acta's modern lab.



ABLE TECHNICIAN, Chester Ciezki, is shown reading a Jarrell-Ash Microphotometer. Acta uses 4 x 10 glass plates for their Spectrum Analysis.

CLOCK DIALS on a direct reader get meticulous attention of specialist Ernest Amsden. Jobs are "walked-in" any day, any hour of the day—and completed fast.





PAPER being delivered at G.A.M.S. by Carl J. Leistner, United Carbon Products Company, before the assembled symposium. Excellent interpretation was given by M. Cornu, Compagnie Francaise de Raffinage, shown seated at the speaker's table.

On June 21–24, 1960, in one of the world's most beautiful cities, Paris, France, more than 200 outstanding spectrographers attended the 23rd G.A.M.S. Conference—the "Groupement pour l'Avancement des Methodes Spectrographiques." The four day program included truly outstanding papers in the fields of Optical Emission, Mass, Absorption Spectroscopy, and Gas Chromatography.

United Carbon Products Company was ably represented by

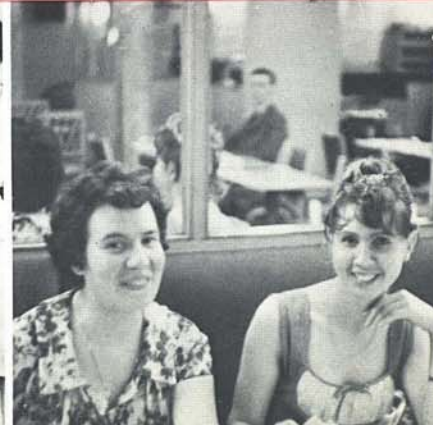
C. J. Leistner who presented a paper at the Congress. He was assisted by M. Cornu, Director of the Laboratories, Compagnie Francaise de Raffinage, Raffinage de Normandie, Harfleur, Seine Maritime, France, who acted in the capacity of interpreter. After the conclusion of the G.A.M.S. Symposium, Mr. Leistner travelled through much of the continent in the interests of United Carbon Products Company.

Mr. Leistner's paper was well received by more than 200

BUSINESS of the conference being conducted by Mlle Josien, Faculte des Saines, de Paris; M. Robert, President des G.A.M. S.; M. Bellier, Director des Laboratoire, National d Enais; and M. Loeville, Consciller Scientifique du G.A.M.S.

VISIT to Fountainbleau occupies M. Lopez de Ascona, Institute Gedogico y minero de Espana; M. Leistner, United Carbon Products Co.; and M. Asensi, Institute Nacional de Tecnico Aeronautica. Man in a hurry scurries in background

BEAUTY is a beauty, the world around, and the G.A.M.S. organization is fortunate indeed to include secretaries Mlles. Kunz and Legrand snapped while dining at the Restaurant de l'Hotel Moderne.



UNITED REPRESENTED AT GAMS IN PARIS



registrants who came from England, Germany, Spain, Belgium, Holland, France, and the United States. The G.A.M.S. is a non-profit organization formed by University and Industrial Laboratories to inform and to publish the results of analytical research, and to coordinate works of common interest. The G.A.M.S. was founded in February, 1944 by a group of French Engineers interested in distributing data concerning the use of emission spectroscopy in analyzing metallurgical products. Its development was rapid, extending its studies to emission analysis of non-conductors, solutions, gases, etc., then to absorption spectrometry, mass spectrometry, x-rays (fluorescence and diffraction), electrical methods chromatography and nuclear magnetic resonance.

The technical development of G.A.M.S. was closely followed by the expansion of its information facilities. It now supplies translations, summaries, documentary indexes (one index is established with a summary on cards—1500 cards; another uses a stencil for rapid information—more than 3000 cards). There are separate indexes for electrical methods, chromatography, infrared, and absorption spectrometry. Many original works

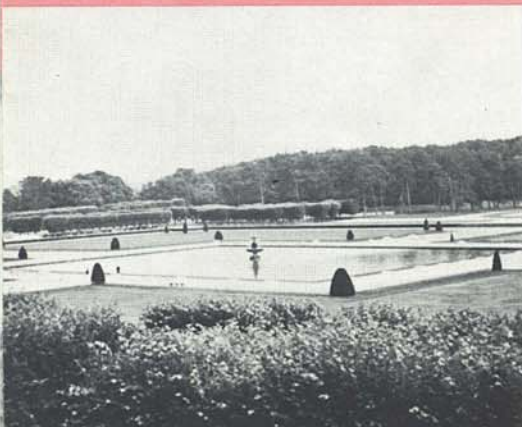
have been published and the convention reports are in such demand that they have now become quarterly "publications."

The success of the 23rd G.A.M.S. Symposium was unqualified. This outstanding organization is focusing attention on spectrographic advances worldwide. Increasing emphasis is being placed on the exchange of information worldwide by the SAS who are organizing a European Tour for the summer of 1961. All these efforts are contributing significantly to the global progress of the spectrographic profession.

GARDEN OF FONTAINEBLEAU as seen by the camera eye of our Mr. Leistner, presents its breathtaking beauty. A visit by the registrants at the G.A.M.S. Symposium was a high spot of the trip.

ABSORBED in imponderable technicalities are C. J. Leistner of United and Dr. Hans J. Eichhoff, Spectroscopy Instructor, Institute for Inorganic Chemistry, University of Johannes Gutenberg, Mainz, Germany.

ITINERARY of United's C. J. Leistner was enhanced by a visit with the renowned Professor Dr. H. Kaiser, Director of the Institute for Spectrochemistry and Applied Spectroscopy, Dortmund, Germany . . . shown at his desk.



the grapevine

HELP WANTED

... to contribute papers for the February 7, 1961 meeting of the New York Section of the SAS, meeting at the Hotel New Yorker in New York City. If you have some "tricks of the trade", gadgets, or short technical articles to share with your fellow spectroscopists, write or call: Mr. Robert J. Carls, American Smelting & Refining Co., Box 151, Perth Amboy, New Jersey.

EIGHTH DETROIT ANACHEM CONFERENCE

It is expected that the Eighth Anachem Conference, to be held October 24-26, 1960 at McGregor Memorial Conference Center, Wayne State University, Detroit, Michigan will set new highs in both attendance and exhibitors.

Highlighting the conference will be two major addresses; on Tuesday afternoon, October 25th, the Anachem Award Address "NBS Standards—Past Forty Years In Retrospect" by Harry A. Bright, Chief of the Analytical Chemistry Section, National Bureau of Standards; that evening, the Anachem Conference Address will be given by Dr. Edward Wichers, Associate Director for Chemistry, National Bureau of Standards, under the title "Preparation and Evaluation of Pure Substance Standards." Both addresses are calculated to hold the intense interest of the region's analysts.

Some thirty-eight papers have been carefully selected for presentation and promise genuine stimulation. Additionally, some thirty-three exhibitors will display their latest equipment and instrumentation in the modern facilities of the McGregor Memorial Conference Center. The breadth of this growing conference is a tribute to the 1960 Conference Committees: General Chairman—George E. F. Brewer, Marygrove College; General Chairman-Elect—Albert G. Gassmann, Ethyl Corporation; Anachem Award Chairman—Paul K. Winter, General Motors Corporation; Arrangements Chairman—L. B. Stadler, Parke Davis & Company; Exhibits Chairmen, William G. Walsh and Arthur Maczei—E. H. Sargent & Company; Program Chairman—M. D. Cooper, General Motors Corporation; Publicity Chairman, Thomas O. Morgan, General Motors Corporation; Registration Chairman—D. A. Keyworth, Wyandotte Chemicals Corporation. Certainly theirs is a job—excellently done.

And, for the difficult task of properly steering this growing organization, may we further salute the Officers of the Association: President, James A. Burns, Jr., Ethyl Corporation; President-Elect, Clyde W. Leaf, Wyandotte Chemicals Corporation; Secretary—Thomas O. Morgan, General Motors Corporation; and Treasurer—Anne Bartruff, General Electric Company. Perhaps we may be accused of optimism about a group, right in our own "backyard", but we sincerely believe this group is one of the most vital to be found anywhere in the country.

JULIUS CAESAR

... on seeing Cleopatra for the first time, excitedly commented, "Wow, a perfect XXXVI, XXII, XXXVI!"

REASONS WHY WOMEN BUY:

(1) Husbands says she can't have it; (2) It makes her look thin; (3) It comes from Paris; (4) Her neighbors can't afford it; (5) Nobody else has one; (6) Everybody else has one; (7) It's different; (8) Because.

PRELIMINARY PITTSBURGH ANNOUNCEMENT

Word has been received that the Twelfth Pittsburgh Conference on Analytical Chemistry and Applied Spectroscopy, sponsored by the Analytical Chemistry Group of the Pittsburgh Section of the American Chemical Society and the Spectroscopy Society of Pittsburgh, Pennsylvania from February 27 to March 3, 1961. As the largest conference in this field, all interested parties are urged to attend the 1961 Conference.

Symposia on New Frontiers in Optics and Spectroscopy, Electron Micro Probe Analyser, Infra-Red Spectroscopy, Polarography, and Ion Exchange are planned. In addition to these subjects, papers are invited in all areas of analytical chemistry and spectroscopy. Information regarding papers should be addressed to:

Dr. William F. Harris, Program Chairman
The Pittsburgh Conference
Westinghouse Electric Corporation
Research Laboratories
Pittsburgh 35, Pennsylvania
Telephone: CHurchill 2-1500

Once again, in 1961, it is expected that more than 100 companies will exhibit their very latest products in the various halls of the Penn-Sheraton Hotel. The importance given to the Pittsburgh Conference always permits the registrants to talk to many of the top people who follow their exhibits closely during this symposium. The 1961 Program Committee is: Chemical Analysis, Dr. W. A. Straub and Dr. J. P. McKaveney; Emission Spectroscopy, Mr. J. K. Scanlon; Gas Chromatography, Dr. C. F. Glick; Molecular Spectroscopy, Dr. R. A. Friedel and Dr. W. G. Fateley; Nucleonics, Mr. H. F. Beeghly; Printing, Mr. Norman Walker; X-Ray Spectroscopy, Mr. R. K. Smith; and Chairman, Dr. W. F. Harris. Our best wishes for the "best conference yet" ... and we'll be seeing you there!

THIS SHOULD MAKE US FEEL GOOD:

Home ownership is an American dream which is fast being realized. Today, one out of ten U. S. families are home owners. They are carrying the largest mortgage debt in history, but their equity amounts to \$266 billion and is increasing at the rate of \$11.5 billion annually. Personally, our own little equities seem to be increasing much less rapidly.

HAVE YOU HEARD

... about the ingenious Florida store owner who raffles off a new car every year to delinquent debtors? Customers in arrears are simply notified that they can get one raffle ticket for each dollar of debt they pay up. Don't know whether this would increase delinquency ... but the report states that the dollars just pour in.

SHORT NOTE OF CAUTION

The "instant credit" offered in credit cards is certainly a cardinal convenience. But, the minute a card is lost, it becomes an "instant liability." In the hands of the wrong person it can cost you a good deal of your hard earned cash. So—give your card wallet to your secretary and ask her to list each card by number so that if you lose your cards you can report the loss promptly.

FLASH FROM THE WINDY CITY

Our grapevine to the Chicago Section of the S.A.S. brings us preliminary information about the up-and-coming Twelfth Annual Symposium on Spectroscopy. Once again the "opulent Symposium" will be held at the magnificent Conrad Hilton Hotel on the lake shore in Chicago's "front yard." The date is May 15-18, 1961.

An invitation is extended for original papers in the fields of mass, emission, x-ray, general absorption, infrared, NWR, EPR, Raman and Flame Spectroscopy. A definite deadline for titles and abstracts has been set for February 15, 1961. Further, and more complete, information will be gladly supplied by the Symposium Coordinator, Mr. William Ashby, Continental Can Co., 7622 South Racine Avenue, Chicago 20, Illinois.

In its unusually distinctive surroundings, the Chicago Symposium will feature an instrument exhibition by leading manufacturers in the field of spectroscopy. We are looking forward to another interesting Chicago meeting, as we know hundreds of other midwestern spectrographers are also anticipating, in surroundings that are truly luxuriant.

SILLY SIGNERY:

In a Los Angeles shop specializing in clothing for tall women, "We Have Everything for Tall Girls Except Tall Men." In the window of a pawnshop, "Come in and See Us At Your Earliest Inconvenience." On a Nebraska highway, "Main Road Open While Detour Is Being Repaired." And on the electric chair in a midwestern penitentiary, "You Can Be Sure, If It's Westinghouse."

★ ★ ★

★ ★ ★

★ ★ ★

CANADIAN CAPERS—At the 7th Ottawa Symposium

Our hearts were gladdened at the magnificent display of foliage colors . . . brilliant reds . . . bright oranges . . . soft yellows . . . in a lush background of greens. Frankly, we almost didn't make it to the conference for the big Fall Color Show along the Ottawa River. We now truly understand why Canada chose the Maple Leaf as their emblem.

Our hearts were saddened as we glumly viewed the burned out Gatineau Club. Many, many fond memories were called up and it was with a deep feeling of loss that we viewed the ruins. Somehow, we feel that there will be a re-building and out of the loss will rise an even finer club carrying on the traditions of a joyous past.

Saturn was seen, through the powerful refractory telescope at the Dominion Observatory, by a group of interested spectrographers. Made our own heads spin a little to view this famous ringed planet revolving around the sun at a mean distance of 886,000,000 miles. This is truly one of the finest observatories in North America . . . and our thanks go out to the Programme Committee for providing this opportunity.

We were impressed, this year more than others, at the display of enthusiasm by the registrants at the Symposium. It seemed to us, and we have attended every major Spectrographic Conference in North America, that the Seventh Annual Cana-

MORE DAFFYNITIONS

Note and Initial—Let's spread the responsibility for this.

Strict Quality Control Is Now Being Exercised—We fired the girl who was dropping hair pins in the gunk.

Extensive Development Work Led To This New Adhesive—While working on another project, this stuff spilled on the floor and we still haven't been able to clean it off.

A Study Is Being Made—Haven't done anything about it yet.

We Are Aware Of It—We had hoped that the fool who started it would have forgotten about it by this time.

Will Advise In Due Course—If we ever figure it out, we will let you know.

We Will Look Into It—By the time the wheel makes a full turn, we assume you will have forgotten about it.

Exciting New Product—This sold miserably for the past eleven years so we have added some chrome and repackaged it.

Advanced Design—Ad writer couldn't understand it.

High Accuracy—The joints meet.

Trouble Free—Only the repairs cost money.

Cost Saving Will Result Due To Easier Processing—The product is damn expensive.

Modern Production Equipment Has Been Installed—The old machine fell apart and we had to buy a brand new one.

A Clarification—To fill in the background with so many details that the foreground goes underground.

A Conference—Place where conversation is substituted for the dreariness of labor and the loneliness of thought.

A Program—Any assignment that can't be completed by one telephone call.

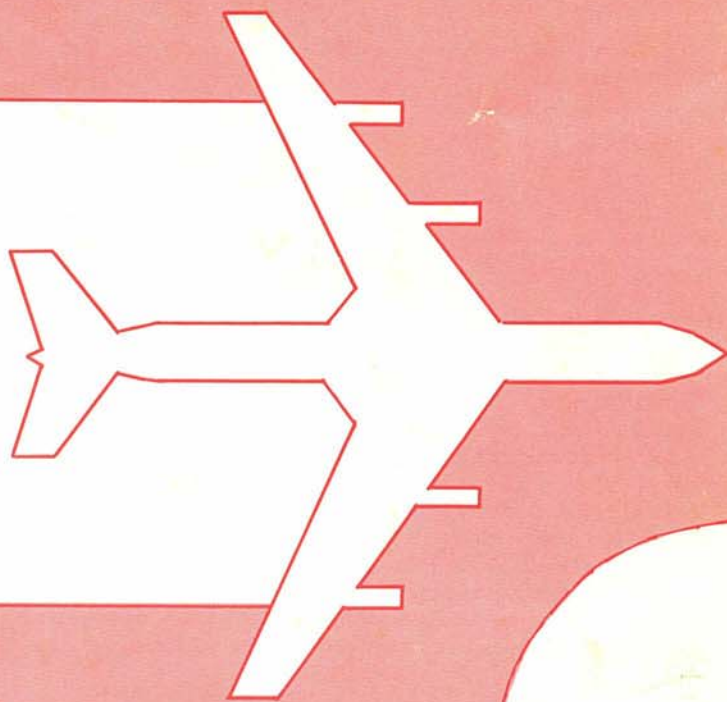
To Implement A Program—Hire more people and expand the office.

dian Symposium had more spirit, vision and verve than any we have been to in years. Perhaps one of the underlying causes is the remarkable growth being experienced in Canada . . . it's literally contagious . . . and grand to experience. Discussion periods after the papers . . . "bull sessions" during the coffee breaks . . . even conversation away from the Symposium—everything reflected the vigor of this meeting.

Rosiest of rooms, in our humble opinion, was the Rose Room of the Chaudiere Golf Club. Indeed, this is hospitality unlimited. It was our good fortune to visit here a couple of times and most obvious was the reason they continually draw overflow crowds. An excellent floor show—beverages to soothe or excite, whichever you wished—and capable, courteous management . . . the Chaudiere's reputation is spreading over the continent. Only one drawback was evident—and this, we understand, is a matter of law—the early closing hours came much, much too soon.

Van Cliburn, renowned young pianist, would have blushed with inferiority if he could have heard United's distinguished president, George T. Sermon, as he sat down to the piano in the music room of the Chateau Laurier. A candid shot taken proves that our good friend Martha Zietlow of the New York Central Railroad was positively enthralled . . . or could it be that we have misinterpreted the look on her face?

FLY WITH US TO EUROPE IN 1961



Adding to the international flavor of this issue of Arcs & Sparks is the following information concerning a tentative charter airplane flight and three week visit to the Continent from May 27—June 17, 1961. The Society for Applied Spectroscopy, through its International Activities Committee, is thoroughly investigating the feasibility of this venture. As of this date, it is figured that 60, or more, participants can make the charter flight a possibility.

Chairman of the International Activities Committee, Theodore H. Zink, Vitro Chemical Company, 4000 North Hawthorne Street, Chattanooga, Tennessee states there will be three meetings of special interest to all Spectroscopists and Instrumental Chemists:

- 1—The Fifth Symposium on Molecular Spectroscopy, Amsterdam, Netherlands, May 29—June 6, 1961.
- 2—The Colloquium Spectroscopicum Internationale, Lyon, France, June 5—June 10, 1961.
- 3—The International Symposium on Vapor Phase Chromatography, Paris, France, June 14—15, 1961.

While these symposia might be interesting, it is stressed that no participant in this charter flight has to attend any sessions. He, or she, may spend the time between arrival at Amsterdam, 10 A.M. Sunday, May 28th and departure from Paris, 10 P.M. Saturday, June 16th in any manner desirable. Travel arrangements to Lyon and Paris will be made for those so desiring. For those not interested in Molecular Spectroscopy, an attempt will be made to organize a three-day tour of Holland and some of the (non-molecular) Laboratories in that area. Similar arrangements will be made in Lyon for the Molecular Spectroscopists. And, quoting the irrepressible Mr. Zink, "In Paris . . . ah well!"

Each participant must be a member of the S.A.S., or a close relative (father, mother, son, daughter, wife or husband). Also, the participant must have been a member of the S.A.S. for at least six months prior to departure. It is estimated that, depending on the number of participants, the round trip air fare would range between \$365 as the highest possible, down to \$250 with some 80 persons participating. On each flight, two meals—dinner and breakfast—will be served and there will be a complimentary drink or two. Other travel, hotel and food costs will be additional and are not included in the above figure. However, it is probable that hotel rooms and meals can be lined up in blocks so as to get the very best prices wherever the group goes.

The flight is dependent upon early registrations. All persons interested in participating, either definitely or tentatively, are requested to contact Mr. T. H. Zink immediately. We cannot help but feel that this pioneer venture by the progressive S.A.S. may well set a pattern in the years to come . . . a pattern which will greatly enhance the interchange of ideas for the encouragement of better professional standards the world around.