## ARCO & SPARKS

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#### THE PRESIDENT'S CORNER

The decision to publish this Special Issue of Arcs & Sparks was reached when the intense interest in international spectroscopy became so very apparent. Talking to many U. S. spectroscopists about the Ninth International Symposium sparked so much enthusiastic questioning that we thought it would be of lasting value to publish the stories and pictures of the meeting at Lyon and the continent. Also, the many customers and friends United has made worldwide, we felt, would appreciate this photo report of places

and names they have recurringly heard and admired. Because we wanted to include as much on the symposium as possible, we have excluded several regular Arcs & Sparks features from this issue, but they will be back in future issues. To all our friends abroad, and to the GAMS organization, who have made this report possible, we express our sincere appreciation.

George T. Sermon President

### Cover Story...

No finer emblem could have been selected for this Special G.A.M.S. Issue than the famous "Arc de Triomphe" in Paris, France. Symbolic of victory, the world renown "Arc de Triomphe" was decreed by Napoleon on Feb. 12, 1806. The arc bears the names of 386 generals who were great figures in the wars of the Republic and of the Empire. On the great arcade is the stone tomb of the Unknown Soldier—buried on Nov. 11, 1920. The "Arc de Triomphe" is elevated on a site at the center of a circular area from which twelve avenues proceed like the rays of a star. Visited by scores of spectroscopists attending the Ninth International Symposium—it gave inspiration to find victory in our own search for new truths.

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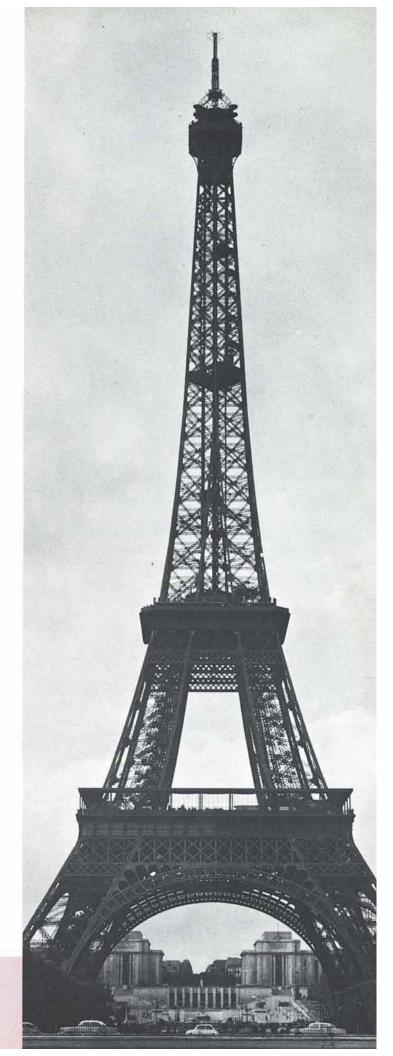


# THE BRILLIANT IX COLLOQUIUM SPECTROSCOPICUM INTERNATIONALE

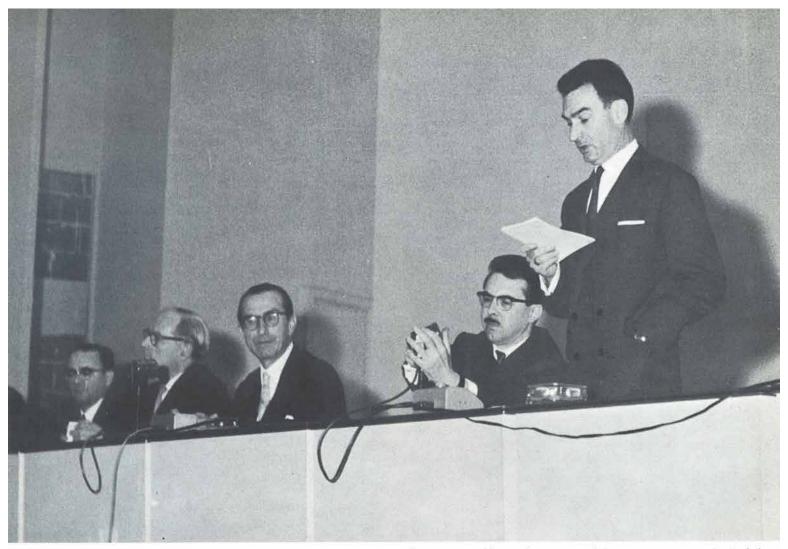
Perhaps never before in the history of spectroscopy has there been so magnificent a scientific assemblage as the Ninth International Spectroscopy Conference held in Lyon, France, June 5-10, 1961.

From all parts of the world, some 750 learned scientists, representing thirty nations, gathered at the ultra-modern Palace of International Congresses. Situated between the Rhone and the Parc de la Tete d' Or, very near the heart of the city, this striking structure offers the ultimate in facilities conducive to both work and relaxation. Some of its features include: an auditorium with a seating capacity of 1,225; five committee rooms of 20 to 250 seats; a panoramic restaurant seating 1,500; two lobbies; a foyer; two bars; a large hall; an underground garage; several parking areas; and, all related services necessary to run a congress with maximum efficiency and minimum worry.

A marvel of planning, the Palace of International Congresses was a model location in which everything had been provided: recording facilities, sound proof projection rooms, wide angle viewpoints for cameramen, sound recording points, easy access for TV trucks, laboratories, workrooms for journalists, telephone booths, sizeable cloakrooms, a first aid room, a printing room with five rows of small rotary presses corresponding to the five major languages used, all directly connected to the installation for simultaneous translation in five languages in the (Con't on page 5)



WORLD'S MOST BEAUTIFUL TV ANTENNA, seen by spectroscopists on leave from Lyon, is of course the famed Eiffel Tower. Erected on the Champ-de-Mars in Paris in 1889, by the engineer Eiffel, it is used today as a TV antenna in addition to being a Parisian landmark.



STRIKING PHOTO of speaker's platform in the Palace of International Congresses while Ninth International Symposium was in session includes the following luminaries (left to right): M. Scribner, Directeur Scientifique au National Bureau of Standard, Washington (USA); M. Menzies, Directeur Scientifique aux Etablissements, Hilger and Watts, London; Monsieur le Professeur Tapernoux, ler adjoint au Maire Directeur de l'Ecole Nationale Veterinaire, de Lyon; M. Robert, President du Comite d'Organisation du IX° Colloque, President du GAMS, Adjoint au Di-



SWEEPING ARCHITECTURAL SYMMETRY sets the stage, in most modern style, at magnificent Palace of International Congresses at Lyon, France where the symposium was held. Some 750 learned scientists were in attendance in this truly functional structure.



recteur General Scientifique du Centre d'Etudes et de Recherches des Charbonnages de France (Cerchar); Monsieur Louis, Recteur de l'Universite de Lyon; Melle Cauchois, Professeur a la Faculte des Sciences, Directeur du Laboratoire de Chimie-Physique, Paris; Monseigneur Gardette, Recteur de l'Universite Catholique de Lyon (Universite Libre); Monsieur R. Ricard, Doyen de la Faculte des Sciences (Libre) de Lyon.

#### (Con't from page 3)

main auditorium and committee rooms. Indeed, this was a setting fitted to the importance of the occasion.

A spectacular growth in attendance is recorded since the first international conference, held in 1950, at which some 120 representatives from twelve nations participated. Organized by the Group for the Advancement of Methods of Spectroscopy (G.A.M.S.), presided over by Monsieur Robert, the number and quality of spectroscopists meeting this year at Lyons attests to the dynamic development of spectroscopy and the increasing importance of its industrial applications throughout the entire world.

In five action-filled days, the registrants were exposed to new developments and new concepts from all over the world. Additionally, the period provided a time of meeting old and new acquaintances alike—including nine conference magistrates as well as many other important scientific personalities. In all, some eighty-four papers were given: 35 on emission (metals and non-conductors); 21 on absorption in the infrared, the visible and the ultra-violet, flame and raman; 14 on

mass spectroscopy and 7 on diverse other themes. As would be expected, the quality of each of the papers and penetration of the discussion was top rank.

Running the presentation of papers a close second for interest was a vast display of scientific books and documents exhibited in the vast glass hall of the first floor of the magnificent palace. And, to add even more interest, was an adjacent exposition hall in which was displayed an imposing variety of analytical instrumentation. This included the latest developments from France, Germany, Switzerland, Belgium, Great Britain, and the United States. The value of the materials on display was well in excess of 600,000,000 old francs. The instrumentation exhibit was opened a full day to the public and was considered without equal in the entire area.

Truly, this was the finest international spectroscopy conference yet . . . we salute everyone connected with it . . . and we know that spectroscopists world-wide will eagerly await the next effort looking back with wonderful memories to this, the Ninth Colloquium Spectroscopicum Internationale.



PHOTOGRAPHED UNAWARES is this distinguished group of registrants: (left to right)—M. Deceuleneer, Usines Emile Henricot Court St-Etienne Belgique; M. Warnecke Jr., Centre de Physique Electronique et Corpusculaire de la Compagnie Generale de Telegraphie sons Fil (CSF) Orsay (France); M. Ricard, Doyen de la Faculte Catholique de Lyon, Lyon—(Rhone); M. K. Pfeilsticker, Chem-Untersuchungsamt der Stadt Stuttgart, Stuttgart, Stafflenberg Str. 81; M. Legrand C., Laboratoire de rayons X et de lipochimie du Centre National de Recherches Scientifiques (CNRS) Bellevue, France; M. Junkes S. J., Specola Vaticana Citta del Vaticano Castel Gandolfo Roma; M. Croissant, Fonderie de Precision de Nanterre (Seine); M. Svejda, Prof (Technologie) Gewerbemuseum IX Wahringerstr 59 Wien XIX (Autriche); M. Delille, Etablissement Promesur Paris; M. Scribner B., National Bureau of Standards, Washington 25, D.C., USA.

FRENCH BEAUTY is no fable, as attested by (left to right): Madame Loeuills, Wife of M. Loeuille, Conseiller Scientifique du G.A.M.S.; Madame Croissant, Wife of M. Croissant, Ingenieur a la Fonderie de Precision de Nanterre; Melle Kunz, Secretaire du GAMS; Melle Legrand, Secretaire du GAMS.





THREE KEY MEN in conference (left to right): Monsieur Robert L., President du Comite d'Organisation du IX° Colloque, President du GAMS, Adjoint au Directeur General Scientifique du Centre d'Etudes et de Recherches des Charbonnages de France (Cerchar); M. Pomey J., President du Comite Scientifique et Technique du IX° Colloque, Directeur Scientifique a la Regie Nationale des Usines Renault (RNUR); M. Robin, Maitre de Conferences a l'Institut National des Sciences Appliquees (INSA) Villeurbanne President du Comite Executif Iyonnais du IX° Colloque.



GAMS DIGNITARIES graciously gather in organization's office to be photographed (left to right): M. Curtet, Directeur Agence Wagons-Lits-Cook, Lyon; Melle Kunz, Secretaire du GAMS; M. Robin, Maitre de Conferences a l'Institut National des Sciences Appliquees, Villeurbanne (Rhone), President du Comite Executif lyonnais du IX° Colloquim; M. Pomey J., President du Comite Scientifique et Technique du IX° Colloque, Directeur Scientifique a la Regie Nationale des Usines Renault (RNUR); M. Cornu, Ingenieur au Centre d'Etudes Nucleaires de Grenoble (Isere); M. Loeuille, President du Comite Executif de Paris, du IX° Colloque Conseiller Scientifique, du GAMS; M. Artaud, Ingenieur au Centre d'Etudes Nucleaires de Grenoble (Isere); M. Robert, President du Comite d'Organisation du IX° Colloque, President du GAMS, Adjoint au Directeur General Scientifique du Centre d'Etudes et de Recherches des Charbonnages de France (Cerchar); M. Normand, Ingenieur a la Societe Progil Lyon—(Rhone); Melle Legrand Secretaire du G.A.M.S.; M. Croissant, Ingenieur a la Fonderie de Precision de Nanterre (Seine).



REGISTRATION is expertly handled by (I. to r.): M. Curtet, Dir. Agence, Wagons-lits Cook Co., Lyon, France; Melle Legrand, Secretary of Gams; Melle Kunz, Secretary of Gams; Melle Estrania, Secretary of M. Curtet; Mme Loeuille, wife of M. Loeuille.

COMFORTABLY SEATED, registrants carefully followed the papers (l. to r.): M. Werner, Doc. Burdesanotalt fur Material-prufung, Berlin-Dahlem (Allemagne); Mme. Werner, Wife of M. Werner; R. P. Salpeter, Specola Vaticano Laboratorio d'Astrofisico, Castel Gandolfo (Citta del Vaticano); M. Lopez de Ascona Dr., Institute Nacional de Tecnica Aeronautica e Instituto Geologico y minero de Espana, Madrid (Espagne); M. Milazzo, Doc. Istitute Superiore di Sanita, Roma—Italia; M. Aldo Colli, Doc. Aziende Colori Nazionali Affini (ACNA) Institute Ricerche Chimica Organica Rico, Cesano Maderno, Milano, (Italia).



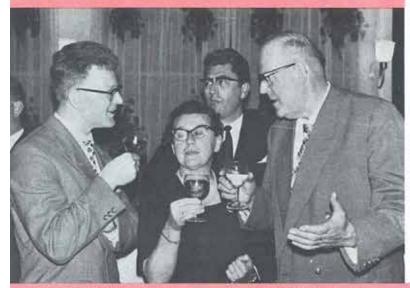
POPULAR PERSONALITY at the Ninth International Symposium, and a name known world-wide in spectroscopic circles: Dr. R. P. Junkes, S. J., Specola Vaticana, Laboratorio d'Astrofisico, Castel Gandolfo (Citta del Vaticano).



SERIOUS CHAT is in progress by: Dr. Nordmeyer, Dortmund, Materialprifungsamt, Germany; Dr. Fassel, Institute for Atomic Research and Department of Chemistry, Iowa State University, Ames, Iawa, U.S.A.; Dr. Birks, U. S. Naval Research Laboratory, Washington, D.C., U.S.A.

#### A TIME FOR FRIENDSHIPS

Around the world, it seems nothing is so successful for inviting new friendships or cementing old ones as the social hour. Amid the splendor of the Palace of Congresses ar Lyons, the world's leaders in spectroscopy exchanged both professional ideas and personal items in an atmosphere of relaxation and comradeship.



ANIMATED discussion being engaged in by: Dr. R. Voight, Duisburger Kupferhutte, Duisburg, Germany; Mrs. Ramb, Dr. Ramb, Firma Carl Zeiss OberRochen, Frankfurt/Main, Germany.



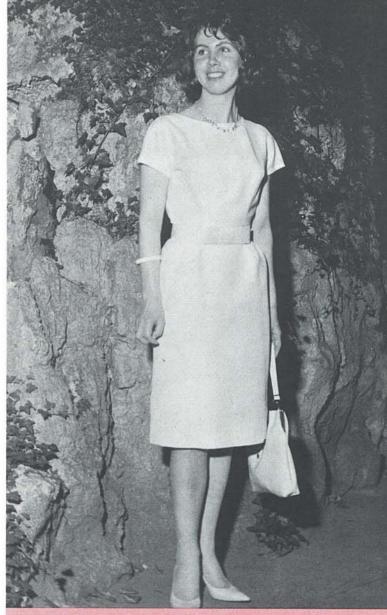
ALL SMILES is this handsome group: Mr. Beach, California Research Corp., Richmond, Cal., U.S.A.; Dr. Schroll, Phys. Chem. Institute, Vienna, Austria; Mr. Marling, Dir. du Jarrell Ash Co., Switzerland; Mrs. Marling; Dr. Pfeilsticker, Chem. Untersuchungsamt der Stadt, Stuttgart, Germany.



INTERNATIONAL aspect of conference is typified in meeting of: M. Robert, President du GAMS, President d'Organization du 1X° Colloque, Paris; Mr. Scribner, National Bureau of Standards, Washington, D.C., U.S.A.

While adding an aura of beauty to the conference's organization, it was at the social hour that the ladies' presence gave particular zest to the program. As international as the conference itself was the range of feminine charm. As the candid photos on these pages will show—a wonderful time was had by all.

We apologize for not being able to reproduce photographs of many, many other prominent personages at the symposium. Our space, being limited, imposes a restriction on us in this respect . . . however, our good thoughts and happy memories shall be with all those who attended this truly spectacular event.



A MODEL, not only of pulchritude but of business efficiency, is a young lady who has been of great help in getting information for this issue: Melle Legrand, Secretaire du GAMS.



THREE MEN in thought are: Dr. Eichhoff, Universite de Mayence, Germany; Dr. Voight, Duisburger Kupferhutte, Duisburg, Germany; M. de Lippa, Consett Iron Company, Comti de Durham, Great Britain.



SHARING EXPERIENCES occupies: Dr. Eichhoff, Universite de Mayence, Germany; Melle Kunz, Secretary of GAMS; M. Svejda, Prof. Gewerbemuseum, Vienna, Austria; Mr. Schuch, Jarrell Ash Co., Newtonville, Mass., U.S.A.; M. de Wizocznski, Equipements Industriels, Paris, France; Dr. Lippincott, University of Maryland, U.S.A.



FAMOUS POSTOFFICE of Montmerle, the town in which the "Scandals of Clochemerle" occurred . . and from which our group probably mailed some interesting postcards.



TWO SCIENTISTS probing the "Urinoirs" built to the wall of the church of Montmerle: Dr. Eichhoff, Universite de Mayence, Germany, Dr. Golling, Siemens, Schuckertwerke, Forschumgslatoratorium Erlangen, Germany.



HAPPY WANDERERS in the "Cavern de Clochemerle" include: Dr. Hubner, Sulzbucker, Braunschweig, Germany (Angest bei der Physikal tech.); Dr. Eichhoff, Universite de Mayence, Germany; Dr. R. P. Junkes, S. J., Specola Vaticana, Citta del Vaticano; Mr. Leistner, United Carbon Products, Bay City, Michigan, USA; Dr. Vaight, Duisburger Kupferhutte, Duisburg, Germany; Dr. Golling, Siemens, Schuckertwerke, Forschungslatoratarium, Erlangen, Germany; Dr. Hahn, Mineralogical Institute Frankfort/Main, Germany; Mr. W. Ahlers, Wayside—Aistonroad, Cambridge, England.

#### THE SCANDALS OF CLOCHEMERLE

It is with a rather hesitant pen that this report is being posted for posterity. It has to do with the far flung travels of several wayward spectroscopists at the 9th International Symposium.

While delving into the fact and fiction of fabulous France, several more sturdy of the group stumbled onto the fascinating history of a "public convenience" built in the town of Montmerle. Nothing would do—but like true scientists—they had to see it with their own eyes. So, a touring they went ... the first to our knowledge so entranced by plumbing ... to the village of Montmerle as the adjacent photos testify.

Close to a national scandal occurred in Montmerle in 1923 when, for lack of some excitement, the citizens of this sleepy town decided to erect a new "urinoirs" for the convenience of the populace. Fine, But, where to locate it? So extensive was the infighting among the townspeople on this issue that it became a scandal about which a book was later written by Gabriel Chevallier.

From a sleepy hamler to a boiling cauldron, the village of Montmerle finally decided to locate the "public convenience" directly on the wall of the town church. Here, the blackbirds built their nests and, when the church bell was rung, would fly away. The peasants of that period spoke of the blackbird's bell as "la cloche a merles"—the name remained . . . and the "scandal of clochemerle" lives on.

Needless to say, fortified with strong scientific tradition and equally strong French wine, our exploring group thoroughly verified all the facts of this fascinating event on their tour to Montmerle. We doff our hats to this noble group for so daring a venture into this area of public service.

THANK YOU! It hardly need be said that the publication of this special edition of Arcs & Sparks would have been impossible without the unstinting cooperation of the capable G.A.M.S. staff. To all the staff, and to Melle Legrand, in particular, with whom we have had voluminous correspondence—a sincere, and warm, "thank you." And to the Publi-France Reportage for their unexcelled photography, we are, indeed, most grateful. Please feel free, at any time, to write your suggestions and comments to Editor, Arcs & Sparks, United Carbon Products Co., Bay City, Mich. U. S. A.



#### PHILIPS SUN DIAL...

PHILIPS SUN DIAL won the admiration of many spectroscopists who chanced to visit Eindhoven. A beautiful landmark, it was donated by the many Philip's factories throughout the world on the 60th anniversary of the founding of the parent company. At the base of this striking symbolism are natural stones donated by the factories in the various countries . . . adding to the symbol of Philips as a true worldwide organization.

#### FORMATION OF SPANISH SPECTROCHEMISTRY GROUP

It is a pleasure of Arcs & Sparks to be able to announce, in this special edition, the formation of the Spectrochemical Group under the patronage of the Royal Spanish Society of Physics and Chemistry.

The information obtained by Arcs & Sparks indicates that, at present, the group has more than fifty members engaged in industrial investigative spectroscopic work. Other members are employed by commercial equipment and specialty manufacturers.

The Promoting Council is formed by the following doctors: President, Lopez de Azcona; Vice Presidents, Buriel Marti and Camunas Puig; Secretary, Asensi Alvarez Arenas. Communications may be addressed to office: 119 Serrano St., Madrid 6, Spain. Our sincere congratulations upon the formation of this group and wishes for a long and successful history.

#### "THE HAPPY BEDBUG"



Many fine restaurants have "quaint" names, but the unique dining spot frequented by many of the registrants at the 9th International Symposium was indeed "way out" . . . known as "The Happy Bedbug." A cozy, comfortable, friendly inn, "The Happy Bedbug" was the location of many a happy meal—a happy conversation—and, for our own Mr. Leistner a happy introduction to a new (to him) gastronomical delight—snails! We are happy to report that he had no trouble relative to the permanent possession of the snails but, with a wry smile, states they're delicious.



HAPPY BEDBUG DINERS! Mr. Schuch, Jarrell Ash Co., Newtonville, Mass., U.S.A.; Mr. Leistner, United Carbon Products, Bay City, Michigan, U.S.A.; Mrs. Marling, Dr. Jaschek, Kuffner Sternwarte, Vienna, Austria; Dr. Eichhoff, Universite de Mayence, Germany; Dr. Pfeilsticker, Chem. Untersuchungsamt der stadt, Stuttgart, Germany; Dr. Voigt, Duisburger Kupferhutte, Duisburg, Germany; Dr. Zimmer, Eotvd's University Budapest, Hungary; Dr. Svejda, Gewerbemuseum, Vienna, Austria; Mrs. Svejda.



TEST OF COURAGE comes for Dr. Jaschek—his first snail dinner: Mrs. Marling; Dr. Jaschek, Kuffner Sternwarte; Vienna, Austria; Dr. Eichhoff, Universite de Mayence, Germany.



#### New Cover for Vacuum Cup Electrodes

Now, United offers even greater reliability for solution analysis work with the availability of a new Vacuum Cup Electrode Cover designed by Dr. Schmidt, Head Chemical and Spectrographic Section; Metal Association, Frankfort/Main, West Germany.

Tested in many applications over a long period of time, this new Vacuum Cup Electrode Cover will eliminate splash due to thermal turbulence of the sample; also, it will prevent the firing of volatile fluids in the reservoir cup; and, in all instances, assure the spectroscopist of a better controlled excitation.

The Cover is expertly machined from Teflon to precisely match the Teflon reservoir cup of Vacuum Cup Electrodes, Nos. 6010 and 6011. A request on your letterhead will bring you samples and data . . . why not write us today.

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