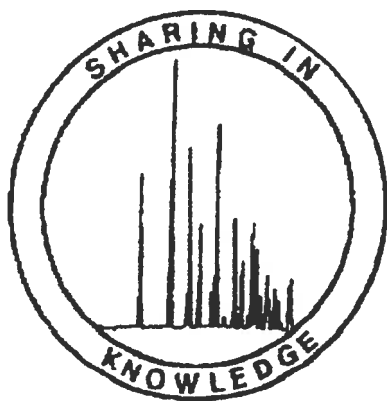


a short historie  
of the  
**CHICAGO CHROMATOGRAPHY DISCUSSION GROUPE**

as told by  
somme of the ORGANIZERS of that GROUPE  
based on their  
**recollections**  
of the early days of the CCDG  
and compiled initially in nineteen hundred eighty one  
on the occasion of the  
**twentieth anniversary of the GROUPE's founding**

these recollections are again set forth for the edification and  
pleasure of the attendees of the  
**PITTSBURGH CONFERENCE**  
in march of two thousand four



## formation of the chicago chromatography discussion group nelson v. armstrong

In the Spring of 1961, the ISA held a meeting on gas chromatography at Michigan State University in East Lansing, Michigan. At that meeting, Don Ford (then of Sinclair Oil) asked me if I knew of anyone else who was interested in forming a chromatography group in the Chicago area. I looked up Lincoln Metcalf at the meeting (then of Armour Chemicals) and the three of us decided to pursue this group idea. It is, therefore, my belief that Don Ford is the originator of the group.

Since I was traveling the area as a salesman for F & M Scientific, it was determined that I could spread the word about the group. At the first meeting, it was determined to exclude any members of instrument companies from the governing board. John Perry and Lincoln Metcalf were made Co-Chairmen of the group.

An effort was made to have the group join the local Spectroscopy Forum meetings. This Spectroscopy Group refused, and it was decided to go it alone. It is interesting to note that one of the Directors of Research in a large oil company at that time told me Chromatography is a fad that has reached its peak and usefulness and would decrease from this point in time. Fortunately, he was wrong.

It was decided to hold a basic Chromatography School. Don Ford was in charge of the laboratory portion; and with a small amount of help from his committee, they decided to make the lab sessions participation not demonstration by the students. The co-operation of the instrument companies in instruments and time was a major reason for the success of the school. It is the principal method the C.C.D.G. gets money to perform its other functions. The school's unique student participation in the lab has continued to help make this school a success for 19 years and is a major reason the Chromatography Group has been financially independent.

The first meeting of the Chicago Gas Chromatography  
Discussion Group will be held on --  
Wednesday - August 30th, 1961  
From 9:30 A.M. to 5:00 P.M.  
at the Auditorium of the Presbyterian-St. Lukes Hospital.  
The program will include nine papers - two of which  
will be presented by Mr. D. H. Desty. Those who are  
interested should contact Dr. R. E. Dedman at Pres-  
byterian-St. Lukes Hospital.  
Registration should be in by August 15th. A fee of  
\$3.50 should accompany the registration and includes  
the luncheon.

## the early history of the chicago chromatography discussion group lincoln d. metcalfe

The idea for the Chicago Gas Chromatography Discussion Group essentially began for me in early 1961. Nelson Armstrong, who then was a salesman with the F & M Scientific Company, suggested the idea to me at what was then the Armour Industrial Chemical Company Research Laboratory. He proposed that I organize a Gas Chromatography Discussion Group patterned after the London Gas Chromatography Discussion Group. I thought that it was a good idea. We decided to approach other chromatographers in the Chicago area with the idea of setting up such a group. Among the first I approached were Dr. Robert Dedmon of St. Lukes Presbyterian Hospital and Mr. Raymond Stear, a gas chromatography salesman for Barber Colman Co. Both of these gentlemen agreed it was a splendid idea and would help in any way possible.

However, the first general meeting for forming the nucleus of the C.C.D.G. occurred at the 1961 ISA International Symposium on GC at the Kellogg Center at Michigan State University in Lansing, Michigan held June 13-16. At that time, I posted a notice requesting an informal meeting of all Chicago area chromatographers interested in forming the GC Discussion Group.

Persons responding to the notice included Don Ford of Sinclair Oil, Leo Kauffman of Swift, Nelson Armstrong of F & M (later Hewlett Packard), Seaton Preston, Murray Barsky of Argonne, John Winters of Amoco, and a number of others.

Only one thing brought this group together and that was their intense interest and excitement over gas chromatography and its vast analytical potential. However, no specific arrangements were made to meet again after we all returned to our jobs in the Chicago area.

Several weeks later, Dr. John Perry of Sinclair called and suggested doing something about the organization of the C.G.C.D.G. I made arrangements to meet with him and Dr. Robert Dedmon at Presbyterian-St.Lukes Hospital. This was the first of many meetings we three had in order to decide how to organize the group. Dr. Perry had access to a fund of information concerning the London Gas Chromatography Discussion Group at that time. Mr. D. H. Desty, British pioneer in gas chromatography, was working at Sinclair Research Laboratory as an exchange program chemist. Mr. Desty was helpful in giving information about the London organization after which we patterned the C.G.C.D.G.

After a number of meetings between John Perry, Bob Dedmon and myself, we decided to hold the first all-day meeting. Dr. Dedmon used his influence to get the hospital's A.B.Dick Auditorium for this meeting and the lunch room of the nurse's home for a buffet lunch. (Some people still claim that the only thing they remember about this meeting is lunch in the presence of many pretty nurses.)

The Chicago area has always had an excellent pool of scientific talent. There was no problem getting speakers for this meeting. The meeting was held on August 30, 1961 and built around Mr. Desty. Other speakers included Dr. Dedmon, George Lee of Swift, Professor Don Ford of Northwestern, L.D..Metcalf of Armour Industrial Chemical Company, Dr. R. Martin of Amoco, and Dr. M. Horwitt of Elgin State Hospital.

The first program was an outstanding success. About 200 people attended. Every seat was taken in the auditorium with people standing in the back. I can still see Lyle Packard, the owner of Packard Instrument Co., standing in the back watching the proceedings while rocking back and forth on his feet. It was obvious that we started something that appealed to the interest of a very broad group of people that no other technical organization in the area was responding to. The list of attendees includes the names of many who are still active in the Group.

After this meeting, John Perry and I became Co-Chairmen of the Group. Dr. Bob Dedmon was appointed Secretary-Treasurer. This was easy to do since we were the sole governing board members. However, we enlisted

the aid of friends and interested people to help us on various committee functions. Seaton Preston was most helpful at this early stage of our organization. Others include Leo Kauffman and George Lee of Swift, Don Ford of Sinclair, Ray Stear of Barber Colman, Nelson Armstrong of F & M and Dr. Clarence Decker of the Veterans Administration Hospital.

Some of us continued to meet regularly to plan the future of the C.G.C.D.G. The second general meeting was an afternoon meeting at Presbyterian-St. Lukes on December 13, 1961. We had a meeting entitled Detectors. The four speakers included James L. McFadden, the President and founder of Gow-Mac, F.S. Jones of Standard Oil, Royce Johnson of Barber Colman and Dr. Clark of Jarrell Ash. Again, this meeting was well attended.

Our small governing board was quite active holding regular meetings. It was decided in these meetings we should have an evening meeting and also take part in the Mid-America Spectroscopy Symposium. We were invited by the Society of Applied Spectroscopy to present a gas chromatography symposium. We had this on Thursday, May 3, 1962 with a full day of papers. Our first evening was conducted at the hospital on June 19, 1962. Among the speakers were Dr. Hugh J. O'Neill and Dr. Irving Domsy. It is interesting to see how early some of our best workers appeared in our program.

At the Governing Board meeting of February 28, 1962, a momentous decision was made...we decided that we should sponsor a course on basic gas chromatography. Little did we envision that these courses would continue for twenty years and provide a permanent income for the C.G.C.D.G.

Seaton Preston began work on the setting up of such a course. In the meantime, we also set up committees on various aspects of gas chromatography such as retention time, GC data handling, instrumentation. We also made some money from the Midwest Symposium. 106 out of 586 attendees registered for gas chromatography sessions.

During the Spring of 1962, John Perry and I contacted and visited all the local universities to see if their facilities could be used for the GC courses. Some of them wanted to run it and be sure they got the major share of the profits. However, Dr. Eugene Lieber of Roosevelt University gave us a warm reception. The terms he gave us were more generous than we could believe....The GC School was under way. We would hold the course in the period between semester breaks during the week of January 28, 1963.

About this time, Dr. Dedmon wrote the first constitution of C.G.C.D.G. We planned more all-day and evening meetings. At this time, gas chromatography was advancing so rapidly we had no problem with speakers reporting new developments. Bob Dedmon was also busy at this time reporting our existence to the entire world with an extensive program of correspondence. Our constitution was completed on July 30, 1962.

The second annual all-day fall meeting was held at Prebyterian-St.Liukes Hospital on October 18, 1962. Speakers included Dr. Art Karmen of NIH, Jim Himes of Richardson and Bill Baitinger of Purdue...

Around this time, we wrote to Dr. Lieber of Roosevelt University and accepted his proposal that we use their facilities for the GC School. Dr. Jay Curtice, a professor at Roosevelt, became involved with the C.G.C.D.G. for the first time. He was of invaluable help to us in getting the first school going. Though we continued to have some evening meetings during this period, the bulk of John Perry's, Bob Dedmon's, my time, and many others was concerned with getting the GC School going.

We developed the ideas and format for the course at this time which would last for many years. We had no money and we could not afford to pay speakers. Furthermore, we didn't have the foggiest idea whether anyone would attend. We also got the inspired idea of asking manufacturers to loan us equipment and a salesman to double as an instructor in the laboratory part of the course. I believe Nelson Armstrong was responsible for this idea. In any event, we gave the impression to each company that every one of their competitors would be there. As a result, we got a commitment from all the major GC manufacturers of that time.

Another inspired idea was that we ask local talent to prepare lectures and help in the laboratory sessions. I knew just about everyone in the Chicago area who was a gas chromatographer and what his specialty was. We had

speaker commitments from Al Thomas of Durkee's, Don Ford of Sinclair, Bob Scholz of Beatrice Foods, Al van der Kloot of Wahl Henius, Leonard Afremow of DeSoto, and many others. John Perry, Seaton Preston, and I planned to give the one hour plenary sessions on theory, etc. The only speaker we intended to pay was Dr. Steve DalNogare of DuPont. However, Steve called me and told me that DuPont would pick up his expenses. We also asked Ed Emory of Monsanto to speak but he already was engaged for that period.

The dates of the first basic GC School were to be January 28 to 31, 1963. The tuition was \$25. We put out a notice not knowing what to expect. Then the roof fell in. So many applications came in, we were astounded. We thought we would maybe have 50 students. We could handle, perhaps 75. We soon had 100 applications, then 125, then 150. We decided to stop accepting applications at about 150. We also changed the format. We had to run two concurrent sessions. Half the students would attend lectures in the morning, the other half would attend the morning laboratory sessions. We would then reverse the groups in the afternoon.

We had a tremendously enthusiastic group of instructors who all worked like beavers to make the school a success. If we needed samples for the gas chromatography laboratory, someone saw to it that they were prepared. We made packings and columns. We bought tubing and syringes. We wrote texts and lectures. I suspect more than one company "volunteered" equipment. The Saturday before the school, a number of us were down at Roosevelt helping set up the labs for the instruments. We had no previous experience with such a large set up with many types of instruments and had to improvise like mad. There probably were never so many gas chromatographs in any college classroom in the entire world as we had for that first school.

We were still getting applications up to the day the school started. I believe we turned down about 75. People threatened me, friends said they would never speak to me again if we didn't let in their special candidates. However, we stood firm and all survived.

In the first day of the school, it was about 0° out. Bob Dedmon arrived at 7 AM and had set up a booth in the Roosevelt lobby. We started lectures and lab sessions at about 8 AM. The school was an outstanding success for the four days of its running. I spent a good part of the week at Roosevelt with several dozen other local GC experts. Most of our faculty later became governing board members and presidents of the group. So our first GC school successfully ended at perhaps (at \$25) the greatest technical educational bargain in history....

We had several more meetings during the Spring of 1963, including an even more successful Midwest Symposium Session. John Perry and I decided that with such a powerful and talented governing board, it was time for us to step down as Co-Chairmen of the Chicago Gas Chromatography Discussion Group. We both had served for over two years as sort of co-fathers of the group. It never had a mother. In those days, women chromatographers were very rare...

The Chicago Gas Chromatography Discussion Group became a very successful organization for a number of reasons. First of all, the people involved were a talented, dedicated, and highly motivated group. It was also that we were part of one of the most exciting times in recent scientific history. This period was the end of the early days of the development of gas chromatography. This excitement and eagerness to share our individual discoveries carried over into the Discussion Group. It was a lot of fun and we could organize any way we pleased. We had no precedent or restraining ties of any older group.

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## CHICAGO GAS CHROMATOGRAPHY

### DISCUSSION GROUP

The Chicago Gas Chromatography Discussion Group is offering a short Course on the practical aspect of Gas Chromatography from January 26th to January 31st, 1963. This four (4) day course will be given at Roosevelt University, Chemistry Department. Tuition is \$25.00 payable to the Chicago Gas Chromatography Discussion Group, and mailed to Dr. Robert Dedmon, Presbyterian-St.Luke's Hospital, 1753 W. Congress, Chicago, Illinois. This Course is being conducted on a non-profit basis. Tuition should be just sufficient To meet necessary operating expenses. Pre-registration is required prior to December 15, 1962. Lectures will be given by invited speakers on each subject Of the following course outline. Laboratory and lecture room facilities of Roosevelt University are being made available for this course without cost. Equipment manufacturers are being contacted to obtain the loan of sufficient instruments to permit demonstrations.

Tentative outline of course on Gas Chromatography to be offered at  
Roosevelt University  
Jan.28 to 31.1963

Advanced Registration required prior to December 15, 1962.

1. Introduction
2. Fundamentals of G.C. Apparatus  
Basic design of G.C. instruments
3. Fundamentals of G.C. Analytical Techniques  
Method of operation of typical G.C. instruments
4. Qualitative Analysis & Retention Data  
Techniques for identifying components from their chromatogram –  
Use of retention data

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