

## Retirement of Dr. Ron Jenkins

Dr. Ron Jenkins (see Figure 1) Executive Director of the International Centre for Diffraction Data (ICDD®), has announced his retirement after sixteen years of service with the ICDD. Dr. Jenkins has held the position of Executive Director for the past five years. Dr. Jenkins has served as a member of the ICDD in many capacities since the early 1970s. He was elected to the Board of Directors in 1984 and from 1996 to 2000 acted as the Corporate Secretary and Executive Director of the ICDD. As Principal Scientist, he directed the effort to convert the Powder Diffraction File™ to state of the art CD-ROM technology. He is recognized for the establishment of the ICDD educational programs which over a period of ten years have provided basic instruction on powder diffraction and X-ray fluorescence to over 2000 students throughout the world.

With Professor Deane K. Smith of the Pennsylvania State University and Ron Anderson of IBM, Dr. Jenkins in 1986 created the journal, *Powder Diffraction*, and served as the first Managing Editor. In 1992 he organized the initial meeting of the Pacific International Conference on X-ray Analytical Methods which brought together scientists from all parts of the world. Under his direction, the membership of the ICDD has increased significantly making the ICDD a truly international organization. The International Centre's Grant-in-Aid Program has also been a benefactor of Dr. Jenkins' leadership. Today, the ICDD awards over fifty grants-in-aid to colleges and universities worldwide. Dr. Jenkins is



Figure 1. Dr. Ron Jenkins.

well known for his long and dedicated association with the Denver X-ray Conference, a program that the ICDD has administered since 1998.

Ron Jenkins was born in Oxford, England and is now a naturalized U.S. citizen. He attended the City of Oxford High School on a scholarship, then went on to study at the City of Oxford Polytechnic Institute, ONC (Chem.), HNC (Chem.), and LRIC, and also studied Physics and Metallurgy at the University of London. He obtained his Ph.D. (Chem. Phys.) at the Polytechnic Institute of New York. In addition to being a Licentiate of the Royal Institute of Chemistry, Dr. Jenkins is also a Fellow of the Institute of Physics and a Chartered Physicist. He is a Distinguished Fellow of the International Centre for Diffraction Data and an Honorary Member of the British Crystallographic Association.

Dr. Jenkins worked for approximately ten years as an Analytical Chemist at ESSO Research Ltd., Abingdon, England, and during this period completed his national service as a meteorological assistant in the Royal Air Force. In 1962 he became the manager of the X-ray Application Laboratory at Philips Research & Control Instruments, Inc., London, England, and in 1967 was transferred to the Netherlands to become head of the X-ray Applications Laboratory, NV Philips, in Eindhoven. In 1971 he was transferred again, this time to the United States, where he took over the post of Principal Scientist at Philips Electronic Instruments in Mount Vernon, New York. In 1985, he accepted the position of Principal Scientist with the International Centre for Diffraction Data, then located in Swarthmore, PA.

Dr. Jenkins' interest in X-ray analytical methods began in the late 1960s during his tenure with ESSO Research (see Figure 2). Although his initial work was in powder diffraction, his interest was soon taken with the X-ray fluorescence method, which at that time was beginning to be widely used in industry and research. He set up the first X-ray fluorescence instruments at ESSO and formed an active worldwide discussion group involving other ESSO affiliates. Both the fluorescence and diffraction methods proved to be invaluable in the study of catalysts, engine deposits, corrosion problems, etc. After joining Philips at their London-based application laboratory, he became heavily involved in teaching, an interest that he still retains today. He was also responsible for the establishment of a series of very successful "User Groups" for users of X-ray fluorescence based methods.

During his time in London, Dr. Jenkins served as Secretary to the local branch of the Institute of Physics. Throughout his career, he has had an interest in the establishment of generally acceptable rules and procedures in the application of X-ray methods and for many years served as Secretary on the International Union of Pure and Applied Chemistry, Commission V4 (see Figure 3), on Spectroscopic Nomenclature. He also served as Chairman of the New York Chapter of the Society for Applied Spectroscopy. Dr. Jenkins was honored as the 1982 Gold Medallist of the New York Chapter of the Society for Applied Spectroscopy.

One of Dr. Jenkins' early research interests involved problems in the application of the newly developed pulse height selection system. In those early days, not much was



Figure 2. Dr. Jenkins setting up one of the first X-ray spectrometers at the ESSO Research Laboratories.

understood about the effects of temperature and pressure on the gas flow proportional counter, and there were many problems in the field attributable to misunderstanding on the part of the user. Dr. Jenkins repeated much of the early research conducted by Hendee, Fine, and Brown, and concluded that much of the inefficient use of pulse height selection stemmed from interference from escape peaks rather than from simply overlapping photo peaks. He published his findings along with long-time colleague Pat Hurley in what was then one of the classic application papers in the field of XRFS. The paper by Jenkins and Hurley received the "Best Paper Award" in the 1974 Volume of Canadian Spectroscopy. Dr. Jenkins has other long-term interests in improvements in instrumentation for both XRFS and XRD and holds a number of patents in this area.

The 1970s proved to be golden years for instrument developers. With the advent of the minicomputer and the microprocessor, along with rapid advancements in direct and

indirect storage, came the tools required for the automation of the rapidly growing number of XRD and XRFS instruments. North American Philips was to play an important role in these developments, thanks to a powerful relationship between two groups—the X-ray group of Philips Research Laboratories at Briarcliff Manor (headed by Dr. Josh Ladell and supported by Dr. Walter Schreiner, Carol Surdukowski and Dr. Joseph Nicolosi), and the Engineering Group at Mount Vernon (later to move to Mahwah, NJ) under the direction of Dr. Frank Paolini, supported by scientists Dr. Ron Jenkins and Dr. David Haas. Notable among the developments resulting from the cooperation between these two groups was the first commercial automated powder diffractometer, the "APD-3500" (see Figure 4). This instrument was introduced in 1970 and became the forerunner of future more advanced instruments.

By the early 1970s it was clear that there was a growing need for better teaching and informational vehicles within the field of X-ray fluorescence. In addition to his already heavy teaching schedule, Dr. Jenkins approached the publishing firm of Heyden and Sons with a view to establishing a specialist journal in X-ray spectrometry. Thus was born, "An International Journal of X-ray Spectrometry," which still flourishes today under its new publisher, John Wiley and Sons. At about the same time Dr. Jenkins, along with Dutch colleague Dr. Hans de Vries, published the first of a series of books on X-ray fluorescence methods. The initial one of these to appear, "Practical X-ray Spectrometry," came at a time when there was a great shortage of books on the subject. The book was very successful and sold over 18 000 copies in both hard and soft cover versions. The book was followed by "Worked Examples in X-ray Analysis," also with Hans de Vries. "An Introduction to X-ray Spectrometry" followed next, and the series was then completed by a fourth book "Quantitative X-ray Spectrometry." This last book was co-authored by Dale Gedcke and Bob Gould, and was essentially based on the lecture notes for the advanced X-ray Clinic on X-ray Fluorescence run at that time by Professor



Figure 3. Commission V4 of the International Union for Pure and Applied Chemistry. Back row (left to right): Strasheim, Zander, Jenkins, Alkmade, Robin. Front row (left to right): Scott, Laqua, Mermet, Sénémaud, Rubeska, Melhuish.

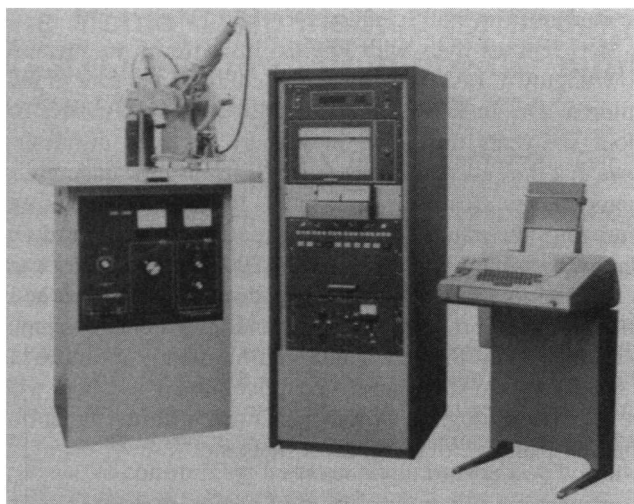


Figure 4. The APD-3500 Automated Powder Diffractometer.

Henry Chessin at the State University of New York at Albany. These courses began in the 1970s with Dr. Eugene Bertin taking responsibility for the introductory week and Dr. Jenkins for the advanced week. Initially, these courses provided a real need for the X-ray fluorescence community. In the early 1980s, diffraction courses were added. It is estimated that over 4000 people attended these Clinics which continued to be held at SUNY Albany until the untimely death of Henry Chessin in 1991. Consequently, the ICDD agreed to continue running the schools, and today they are ably organized by Terry Maguire and her ICDD Conference Service Group.

Sometime in the late 1970s, the American Chemical Society decided to introduce the concept of audio courses to supplement their already successful Short Course program. Working with Harry Walsh of ACS, Dr. Jenkins produced an audio course on X-ray fluorescence to back up the extremely successful ACS Short Course on X-ray fluorescence, which became a national favorite at the Pittsburgh Conference. This course was taught annually by Ron Jenkins and John Croke of Philips Electronics Instruments for nearly 20 years. The audio XRF course was later supplemented with a second course on X-ray Powder Diffraction, again edited by Dr. Jenkins, but this time with added input from a half dozen or so

members of the ICDD. Dr. Jenkins has always been a prolific writer, and to date has produced ten textbooks on X-ray analytical methods, eleven book chapters on X-ray methods, and approximately 230 papers dealing with X-ray applications and instrumentation. He has also acted as a longtime reviewer for the journals *Analytical Chemistry*, *Journal of Applied Crystallography*, and *Spectroscopy*, and has served on the Editorial Board of *Advances in X-ray Analysis*.

Starting from humble beginnings in the 1950s, the Denver X-ray Conference has been one of the most successful meetings of its kind, and in the year 2001 celebrates its 50th anniversary. Annually, during the first week in August, X-ray practitioners gather in the hundreds to discuss their research and interests. Dr. Jenkins has served continuously on the Denver Conference Organizing Committee for nearly 30 years, and has been Chairman of the Committee since 1981. When, in the mid-1990s, the University of Denver elected to discontinue their sponsorship of the Denver meeting, Dr. Jenkins arranged for the ICDD to take over full responsibility for the operation of the meeting and the publication of the proceedings, which continues to this day. His work for the X-ray community has been recognized by the Denver X-ray Conference attendees, and in 1986 Dr. Jenkins was given the Birks Award in X-ray Spectrometry, followed in 1993 by the Barrett Award in X-ray Diffraction. To date, Jenkins is the only scientist to have been given both of these awards.

Another of Dr. Jenkins' ongoing research interests is the study of religious artifacts. His book "Closing the Gap between Science and Religion" outlines his dedication to the Christian faith. One of his specific areas of interest is in the study of the "Shroud of Turin." Dr. Jenkins joined the STURP (Shroud of Turin Research Project) as the X-ray diffraction expert in 1983, and remained active in the group until it disbanded in the mid-1990s. He is a much sought after speaker on this topic and has lectured more than 50 times to an estimated total of 6000 people. Dr. Jenkins was one of the select group of approximately 50 scientists invited to Turin in the year 2000 for a special status meeting on Shroud research and for a private viewing of the Shroud itself.

There were many new challenges to meet when Jenkins joined the ICDD in 1985. With the rapid expansion in the size of the database, there were serious problems not only



Figure 5. The staff of the ICDD.

with data storage, but also with the size of the traditional search manuals which had been the mainstay of the ICDD's business from the very early days. The advent of the CD-ROM was to provide a perfect solution for the data storage problem, and under Jenkins' guidance the ICDD became the first database organization to provide their data on CD-ROM. The problem with the growing size of search manuals was more difficult and one that required much careful consideration. After much experimentation, Jenkins developed the concept of a search manual on a computer, resulting in the first version of the program "PC-Search Index." This program provided a perfect solution, and over the last several years the original FORTRAN 77 code written by Jenkins has been greatly supplemented and improved by the software group of the ICDD (see Figure 5) under the able direction of

the current Principal Scientist, Dr. John Faber.

Dr. Jenkins lives with Phyllis, his wife of 46 years, in Downingtown, PA. They have five children and four grandchildren. Dr. Jenkins has been battling prostate cancer for about six years now, and in January received distressing news that the cancer had metastasized. He is now undergoing chemotherapy treatment and, while initial results look encouraging, the trauma he is now experiencing prompted Dr. Jenkins to bring his planned April 2002 retirement forward to April of this year. However, this does not mean that he is cutting himself off from the ICDD and the scientific community, but simply that his health and his family are now his first priority. He still plans to continue his involvement with the education program of the ICDD and with the organization and planning of the Denver meeting.