In February, Donald McIntyre was a National Lecturer for the Society of the Sigma Xi. In three weeks he gave 16 lectures on X-ray Fluorescence Analysis in Petrology at 16 institutions in Arizona, Texas, Louisiana, and Oklahoma.

In June, Don Zenger was one of 30 teachers who spent two weeks participating in a carbonate field conference in Florida and the Bahama Islands. The project was sponsored by the National Science Foundation. At the same time, Alex Baird was one of 31 U.S. teachers who participated in a National Science Foundation Field Conference on the stratigraphy and structure of the Rocky Mountains in Alberta and British Columbia. Mrs. Shirley Bolton and her husband were vacationing in Hawaii. After these people returned to Claremont, Donald McIntyre and his family went to Britain.

Donald O. Doehring, M.A. '65, will be an Asst. Professor in Geology at Pomona College for 1968-69, replacing Donald Zenger, who will be on sabbatical leave at the University of Liverpool, England, under a National Science Foundation grant. Doehring's M.A. thesis on "The effect of fire on geomorphic processes in the San Gabriel Mountains, California," was published as Vol. 7, No. 1 (1968) of the University of Wyoming's Contributions to Geology. Doehring has completed his Ph.D. thesis -- pediments and fans -- and also has a grant from Sigma Xi to enable him to continue his study of Vandeburgite, a new mineral.

Ed Welday has left Pomona College and is working out of San Diego for Bear Creek Mining Company, the exploration subsidiary of Kennecott Copper Corporation. He is looking for values on the ocean floor.

Jerry Harriss '24 has joined the Pomona College Geology Department as Curator. He has brought order to the collections and also looks after our very valuable library.

NSF-sponsored research by Alex Baird and Donald McIntyre on major and minor elemental variations of granitic rocks is nearing completion, but additional related work has started. In the original research, about 2000 whole rock analyses have been obtained from granitic rocks widely distributed in the Southern California batholith. Maps showing the chemical variations in relation to structural features of the region are now being prepared using the College IBM-360. A trend program in use, written by McIntyre, has recently been published by the Kansas State Geological Survey, Contribution 23. More detailed studies of individual plutons are also being pursued in cooperation with D. M. Morton and others in the California Division of Mines and Geology. One such study, of the Lakeview Mountain Tonalite, has been published by the Division in Special Report 92, and papers were presented at the Cordilleran section meeting in Tucson this past spring. With the cooperation of American Exploration Company, cored samples up to 1000 foot depth in quartz monzonite of the Superior Stock, Plumas County, are being provided for analysis. These afford an excellent opportunity to look at three-dimensional variations in a plutonic mass—a pluton once studied by Charles Anderson (U.C. Publications, 1931). Also under way are analyses of alkaline silicate rocks from the Mountain Pass rare-earth district near Baker. This study is to support detailed mapping of the intrusives by Kenneth Watson of UCLA and Douglas Morton of the Division of Mines.
At the GSA Annual Meeting in New Orleans November 20-22, 1967, Ward C. Smith was toastmaster, and papers were read by C. Wayne Burnham '51, James C. Kelley '63, Pat Muffler '58, Ward Smith, and Tom Wright '57. Also present were Warren Addicott '51, Charles Anderson '24, Donald Doehring, Paul H. Dudley '25, Paul H. Dudley Jr. '53, Mason Hill '26, R. Dana Russell '27, John Shelton '35, Homer Simmons '49, Mary Taylor '67, Bob Tilling '58, Ed Welday, and A. O. Woodford '13.

A. O. Woodford '13 was made an Honorary Member of the Society of Economic Mineralogists and Paleontologists at the annual meeting of the AAPG in Oklahoma City April 20-24. The membership plaque was presented at an Awards Luncheon April 22. Dana Russell '27 arranged a small preliminary luncheon April 21 that included, among others, Mason Hill '26, Manley Natland '28, Bill Jaqua '38, Mary Powell Jaqua '42, Dick Shelton '42, Martha Powell Shelton '43, Donald van Sickle '44, and John Levorsen '53.

Through the generosity of Hugh L. Clary '15, our Clary DE-60 computer has been replaced by the new DE-600 model.

A San Andreas Fault Conference was held at Stanford University last September and the Proceedings were published in May. M. L. Hill '26, Dick Merriam '34, Jack Vedder '48, and Warren Addicott '50 were contributors.

In May, Mason Hill '26 gave a superb talk on the recent revolution in geologic thinking to the geology department at Pomona College. Mase has given a similar talk elsewhere. In Mase's version of the revolution, large amounts of strike slip on major faults get special attention.

Charles Anderson '24 is the 1968 president of the Society of Economic Geologists. He will give his presidential address in Mexico City in November. His Map of Mingus Mountain, Yavapai County, Arizona, 1:62,500, has been published as a Geologic Quadrangle by the U. S. Geological Survey.

Rollin Eckis '27 was awarded an honorary Doctor of Science degree by Pomona College at the 1968 Commencement Exercises. He was cited by Donald McIntyre as scientist, oil finder, and administrator.

Alfred Knight '27 has retired. He spent 8 months traveling in an airstream trailer from California to Central America to eastern Canada. He is now living in Massachusetts and working with the First Church of Christ Scientist in Boston. He invites any eastern travelers to look him up.

On April 8, 1968, Roger Revelle '29 was given the thirtieth award of the William Bowie medal of the American Geophysical Union. Walter Munk said, in the Citation, "On problems concerning a balanced judgment of Earth's geology, chemistry, biology, and physics, he is probably without peer. . . . Roger Revelle's career is one of bold and selfless service to science and to his fellow man." On June 16, 1968, Roger was awarded an honorary degree by Dartmouth College.

Art Colley '31 is chief provincial development officer for U. S. Aid in Viet Nam.

Dick Ten Eyck '35 has left U.S. Natural Gas Corporation and is now an independent consultant, working from Denver headquarters.
Louis Simon '35 is president of the Pacific Section of the AAPG for 1968-69.

John Shelton '35 was in Cambridge in June when his son David graduated in geology from Harvard University. David's singing at Class Day exercises was mentioned in Time Magazine.

Gregory

Jane Everest '38, her husband, and her two children have been spending the academic year 1967/68 in Frankfurt, Germany, where it is cold. Joe Gregory, professor of vertebrate paleontology at Berkeley, worked over at Mainz.

Robert Reed '38 spent the spring in oil exploration near Lome, Togo, West Africa.

Bob Fernandes '41, who supplemented his Pomona geological training with three years of engineering at USC, has for the last two years been working out of Beverly Hills for U.S. National Gas Corporation.

Jack Schoellhamer '42 is now in charge of the operation of the La Coste-Romberg-USGS borehole gravimeter. This meter finds, among other things, new productive oil sands. After successful operations in the Los Angeles Basin, Schoellhamer is moving to the Lost Hills oil field in the San Joaquin Valley. The Lost Hills anticline is marked by an anomalous gravity low of unusual intensity. Jack hopes to find out how this anomaly comes about. There is much fine-grained siliceous sediment in the section and so he is going to make a laboratory study of this material.

George Clark '46 spent the year 1967/68 studying mathematics and computer science at Pomona College. Now he has taken a job at the Pomona College Computer Center. He hopes to master the basic programming techniques before leaving Claremont.

Jack Vedder '48 spent parts of February and March 1968 on a five-weeks' study of the submarine geology off Puerto Rico for the U. S. Geological Survey. Jack and his associates on the U. S. Geological Survey have published geologic map I-487 covering the central San Rafael Mountains of Santa Barbara County. This rough Primitive Area was hard to map, even with the use of helicopters. The rocks are mostly Cretaceous, Eocene, and Miocene. Many good fossil localities were found. The collections were studied and reported on by Vedder and by Patsy Smith '53.

Howard Stark '48 has resigned his Atlantic-Richfield administrative job in Canada and moved to Ventura, California, where he is a consulting geologist. Howard is reworking his M.A. thesis on the Whittier Hills for publication. W. O. Addicott '51 and Jack Vedder '48 have brought up to date the nomenclature of Howard's list of 123 kinds of invertebrate fossils from the Handorf Dairy Pliocene locality. This important list, including notably warm water species, will soon be published.

Homer Simmons '49 is chief of operations for Shell Oil Company in New Orleans. His area includes Louisiana, Mississippi, and the offshore region.

Thane McCulloh '49, of the U. S. Geological Survey, is now living in Claremont. While Donald McIntyre was on his Sigma Xi lecture tour in February, Thane gave three lectures on gravity and density to one of McIntyre's classes. These lectures, which included much that cannot be read in books, were attended by several visitors. The
most recent publication by Thane's group is "Application of gravity measurements in wells to problems of reservoir evaluation," by T. H. McCullough, J. R. Kandle of Mobil Oil, and J. E. Schoellhamer '42. It is the text of a talk given by Thane in New Orleans at the Ninth Annual Symposium of the Society of Professional Well Log Analysts, June 23-26, 1968, and is published by the Society in its Symposium Transactions.

Bob Yerkes '50 and associates have published in USGS Professional Paper 575-C, one of the first examples of a new type of submarine geologic map and sections, based on continuous reflection profiles. The map covers Redondo submarine canyon and part of the associated submarine fan. The fan has a volume of $4.7 \times 10^9$ cu. m., 5.5 times that of the canyon. The canyon was eroded along a fault, in part subaerially but mostly by submarine processes.

Bob is preparing a report on the geology of the La Habra and Whittier Quadrangles for the U.S. Geological Survey. He is making use of M.A. theses at the Claremont Graduate School by Cortez Hoskins '53 and Howard Stark '48. He is also using a Pomona College bachelor's thesis by Homer Simmons '49. No books or manuscripts in the Geology Library are in more frequent use than the theses, especially the M.A. ones.

Bob and Jack Vedder '48 are among the authors of USGS Professional Paper 579, on the Parkfield-Cholame earthquakes of June-August 1966.

Earl Pampeyan '51 and family are going to Europe during the summer of 1968. They will take in the International Geological Congress at Prague. Earl is a manuscript editor for the U.S. Geological Survey at Menlo Park and in his spare time is again working on the geology of the Palo Alto Quadrangle.

Edgar H. Bailey of the U.S. Geological Survey is spending his summers teaching field methods to geologists in the Middle East. In 1968 the field area will be in Iran. Ed hopes to hold the enrollment to 5 men each from Turkey, Iran, and Pakistan, but the enrollment may run as high as 30. One year there were 60. One of Ed's assistants has been Don Kupfer, who spent a good part of the Fifties in Claremont as a member of the USGS team working on the borax deposits of the Mojave Desert. Don described the Middle Eastern project in the February 1968 Geotimes.

Cliff Gray is now running the Los Angeles office of the California Division of Mines and Geology. He still finds time to get in field work on the Bodie and Corona North Quadrangles.

Wayne Burnham '51 continues his experiments on the formation of rocks at Penn State. He and a co-worker had a paper on the 'Experimental metamorphism and anatexis of pelitic rocks' at the GSA meeting in New Orleans in November, 1967.

Ed Heath '52 has resigned from Shell Oil Company and returned to southern California. Frequent changes of residence were too much for Ed and his family.

Patsy Smith '53 of the U.S. Geological Survey, has four papers recently published or in press, on fossil forams of the lower Colorado River area and Recent forams off El Salvador. One, on oxygen-isotope analysis of the forams off El Salvador, appeared in Science June 21. Another is coming out in a United Nations journal.

Paul H. Dudley, Jr., '53, has an executive position with Humble Oil, in Houston.
Neville Carter '56, now on the Yale University staff, has an important little paper on "Meteoritic impact and deformation of quartz" in the 3 May, 1968, number of Science. Neville shows just how high-impact quartz differs from ordinarily deformed quartz. This is one more incident in the running argument concerning impact craters of the type found by Donald McIntyre at Clearwater Lakes, Canada.

N. L. Carter '56, of Yale, C. B. Raleigh '56, of the USGS, and J. M. Christie of UCLA contributed to six papers presented at the annual meeting in April of the American Geophysical Union. These papers dealt with the deformation of quartz, halite, and ultramafic tectonites.

Grant Meyer '57 of the Yale Peabody Museum discovered Aegyptopithecus in the Upper Oligocene of the Fayum during the summer of 1967, at the time of the Israeli war. This genus is first in the series leading to man. It is about the size of a tomcat. There has been great publicity about it. Some people consider it the most important fossil find of the century. Grant spent some time in India during the early part of 1968.

Tom Wright '57 is completing a five-year stint at the Kilauea Volcanic Observatory. He is contributing to publications on the petrology and physical properties of the volcanic products. He is also publishing other mineralogical and petrological papers. He was one of the authors of papers in the January-February number of the American Mineralogist on the X-ray and optical properties of alkali feldspar.

Stan Madsen '57, who topped a Pomona geology major with civil engineering training at the University of Minnesota, has what he considers an ideal job with the Converse Consulting firm in Pasadena.

Bob Tilling '58 was one of the authors of a paper on the Boulder (Montana) Batholith that was given at the 1968 meeting of the GSA's Rocky Mountain Section.

Pat Muffler '58 is joint author of recent papers on the thermal areas and waters of Yellowstone National Park. Pat has also continued his work on the geothermal Salton area in the Imperial Valley. He has a paper on Salton oxygen isotopes coming out in the American Journal of Science. He and Don White have a manuscript ready on the mild metamorphism of the Pleistocene Palm Springs Formation at depth in the geothermal area, with the formation of chloride from dolomite and kaolinite, and epidote from silicates and calcite.

Barry Watson '59 is living in Orange and running a temporary exploration office for American Smelting and Refining Company. One of Barry's jobs is the possible revival of silver mining in the Calico Mountains of the Mojave Desert. The old Waterloo area on the southwestern flank of the Mountains has a very substantial tonnage of low-grade silver ore amenable to open-pit mining. The main silver values are locked up in particles, in silicified rock, so fine that they have yet to be seen even by the electron microscope. With usual methods less than half the silver is recoverable. Apparently this potentially important ore body is in an intricate gravity slide block.

Barry is chairman of the Mining Geology Division of the Arizona Section of the American Institute of Mining Engineers. He gave a paper before the Section May 20 on "Updating the Geology and Structural Ore Controls at Silver Bell, Arizona."

A son, Lane Tyler, was born to the Watsons in August 1967.
Art Sylvester '59 is now a member of the geology faculty at the University of California at Santa Barbara. The March 1968 number of Journal of Paleontology contains the report of the discovery of a new type of lower Cambrian fossil found by Art in the Inyo Range of eastern California. It will be a surprise to Art's friends to learn that he is the author of a paleontological paper.

John Olmsted '59 lives at Crestline where he works as naturalist for the school system. He has developed sets of nearly 700 color slides which are sold to schools through the San Bernardino County Museum. John is now planning an earth science set. His wife and infant son, Eric, accompany him on numerous field trips while he is collecting material.

Walter Gulick '60 plans to come to the Claremont Graduate School in the fall of '68 to work for a Ph.D. in the Philosophy of Religion. He hopes to teach.

Jim Kelley '63 has developed the least squares analysis of tectonite fabric data over a period of years. He worked on it first as an undergraduate, with Donald McIntyre, and later covered the topic in a Ph.D. thesis at Wyoming. Now the essence of this work has been published in the February 1968 Bulletin of the Geological Society of America. Jim is continuing as a statistician. He presented a paper on multivariate analysis of Columbia River sediment at the GSA Annual Meeting in New Orleans last November.

Prue (Hickman) Beckh '64 is working as a guide at the U.S. Pavilion at Hemisfair (San Antonio World Fair) while her husband continues with the AFB at Randolph in Texas, though they expect to be transferred in October. Prue sends greetings to all her friends.

After completing his M.A. in geology at Dartmouth, Steve Norwick '65 spent a year at Northwestern, but he expects to transfer to Wyoming in the fall.

Bob Drake '65 spent a profitable and pleasant year studying structural geology at Neuchâtel, Switzerland. He is returning to California and hopes to spend the year 1968/69 at the University of California, Berkeley.

Dave Pollard '65 has about completed his work for a Ph.D. at Stanford University. His thesis was on the sills and laccoliths of the Henry Mountains of Utah. It involved field and laboratory work, and a theoretical analysis of the emplacement of the magma. Dave has a NSF Post-doctoral Fellowship of $6500 a year plus allowance for dependents and a travel allowance (Geotimes, May-June 1968). He will spend the coming year in England, where he will participate in Professor Ramsay's famous course in rock mechanics.

Dave Copeland '65 is continuing his graduate work at the University of Wyoming. Dave and Pat now have a son, born in May 1968.

Bob Michael '66 will be spending a lot of the summer climbing in the Colorado Rockies, as well as doing field work for his thesis at the University of Wyoming. Zsolt Rosta '67 will be doing field work at Wyoming this summer in his continuation of graduate work there.
Mike Holsten '66 is attending Concordia Theological Seminary, Springfield, Illinois. He took an M.A. in Mathematics at the University of Illinois.

Mary Taylor '67 has switched from a Master's to a Ph.D. program at Wyoming. She will be working on her thesis this summer and teaching a beginning geology lab for the second session of summer school. Mary has acquired a VW, and also a tiny puppy to accompany her in the field. Its ancestry leads Mary to believe that her companion will soon be a very large dog.

Gene Pearson '67 is doing graduate work at Wyoming. He is beginning field work on his thesis this summer, and will study the Permian rocks in southeastern Wyoming and northeastern Colorado.