Historical Context

Administration

Irby's administration ended in 1953, and he was succeeded by Silas D. Snow, who served as president of this institution for longer than any other president, until 1975! Irby, like Torreyson, had health problems that brought about his resignation as president as noted by Minton, pp. 348-349: "Apparently Irby's administration ended with attainment of retirement age, although it was assured by the break in his health...malignancy of the prostate....No record is shown in the minutes of the Board Meetings but it is the understanding of the writer that Dr. Irby asked for and was granted for himself and Mrs. Irby free rent on their apartment and free meals at the Commons. Whether or not they were so authorized he and Mrs. Irby took their meals at the Commons and walked from their apartment, weather permitting, in Wingo Hall. It is significant that Dr. Irby's walk was by very short steps, typical of cancer of prostate patients of advanced age."

William Clarence Ferguson, was a highly regarded faculty member and dean. He served as a faculty member at ASTC from 1939-1942, and then Dean of the College, or chief academic officer, from 1942-1954. He had an "untimely death in 1954 [that] snapped short his work and completed the break which brought a new president [Snow] and dean into office almost simultaneously" (Burdick, p. 87). Burdick pointed out that he had a liberal arts background, whereas Snow had a strong emphasis in education and teacher training (p. 252): "In 1954, only a dozen or so teachers colleges retained that name in the United States. Yet our persistent nominal homage to teacher education inspired divergent ideals. There was the very strong normal school tradition for one; but there was the growing aspiration to match the academic responsibility of the liberal arts. President Snow's background marked him for the former; mine [Burdick's] for the latter." Burdick noted (p.

254) that his "University of Wisconsin B. A. in Economics and M. A. in Geography were earned without a hint of pedagogy."

Burdick (p. 276) further describes Ferguson's death and his appointment to the position of dean in 1954:

"Dean Ferguson's cancer progressed alarmingly, but by spring commencement, remission allowed him to preside. That special note of sadness was followed by a downhill summer that wrenched everyone's emotions. Heat, grief, and waiting were serious psychological hazards. In those weeks, my position became increasingly vulnerable as I sought to ease Dr. Ferguson's workload....he was buried a few days before the end of summer school."



1948 picture of W. C. Ferguson, Dean and Faculty Member in Physics, who died in 1954, at the age of 54.

Burdick continued: "My fatal date was Friday, when my preparations for commencement were interrupted by a summons to the Board of Trustees' meeting. Suddenly I was dean, no application, no questions asked, no interview, no request for an acceptance – just the announced result of a vote." On p. 277, Burdick reflects on becoming dean: "I didn't refuse the deanship. The numbing stress of the moment was mixed with the inertia of personal pride and the waxing exhilaration of what seemed under these circumstances to be unbelievable good fortune. The price I paid for this psychological inflation was the deflation of many years that tested the spirit. More and more I found it difficult to hold myself accountable for things that were beyond my gifts or character. Although I undertook to be dean in hopeful anticipation of what I might do, I soon learned that I should never have left teaching. Increasingly, and too often, I felt as though I were walking into invisible glass doors."

Burdick reflected on the tradition of a top-down administrative style at ASNS and ASTC (with the notable exception of Walter Burr Torreyson), a style that he attempted to moderate during his time in administration (Burdick, pp. 262-272):

"The authority and control from the top down gained a deeper, longer acceptance in Arkansas than in most other sections of the country because of the state's exceptionally strong sense of tradition and social stability....Thus, given the nature of their official charge, it is not surprising that Presidents Doyne, Torreyson, McAlister and Irby had viewed the college as a very direct, personal responsibility....I found a small collegiate community well attuned to one-man rule....The administration was the president....there was a casual acceptance of his complete authority....As this grew with a nearer focus on the nature of the president's job, I became increasingly concerned about the essentially paranoid style of unitary administration and aware that ASTC must bear several conflicting traditions....I was troubled by a general lack of faculty and student comprehension of what ASTC's administration was truly about and the absence of any consciousness of what their own possibilities for involvement might be....It is ironic that, while a president wins trust and confidence by his decisive authority, it is the very authoritarian nature of his ability to act that is the root and the distrust that undermines his office....And liberalization of administration, despite many failings, did indeed offer a more generally acceptable means of managing complex institutions than a needlessly remote domination by central authority."

Nature of the Faculty

In the early 1950s, faculty benefits and working conditions were poor in comparison to today according to Burdick (p. 103): "Not only were there no faculty council, senate, or AAUP chapter, there were no stated conditions of appointment, no procedures for airing faculty concerns, nor any statements of policy governing faculty affairs." Denver Prince, in a personal interview, noted that during this time period national searches were not conducted but rather faculty members were hired based on word of mouth recommendations and interviews. Prince described the manner in which he was hired as follows:

I went back one year during that period [1955-1958] to work on my masters degree at the University of Utah through a National Science Foundation grant. I got my masters and came back and taught one more year of high school at Magnet Cove. Then, while teaching there, I had a call from UCA, or ASTC at the time, that they needed a physical science teacher and would I be interested in being interviewed. I was in school that summer of 1959 in Nashville, Tennessee at Peabody and Vanderbilt, taking 14 hours of courses in summer school, which was a pretty good load. I explained that I should not take the time for an interview due to my heavy course load. Mr. Snow, president of ASTC, sent Dean Burdick over to meet me at the airport for an interview. He must have been a little impressed with me since he went back and recommended that they hire me and I accepted the job. Burdick (p. 103) described faculty benefits and working conditions:

"There were no appointments for longer than one year, except the president's. Nor was there a formal contract. Following the Board's annual election of the faculty, a member received a letter from the president stating his rank and salary 'for the month of July and for as many months thereafter as funds are available.' There was no salary scale, published or practiced. The president dealt individually with each person and kept rates comparable only within departments, thus providing a rough gauge of the relative market values of the various disciplines. Rank and promotion followed no set schedule, because they, too, were governed by the availability of personnel as well as by the president's judgment of an individual's worth." These faculty working conditions led to an AAUP censure in 1963, which fortunately was lifted in 1968 (Bryant, p. 123).

Still, in 1954, with 71 faculty members on campus attempting to keep up with the post-World-War-II demand, the teaching load for faculty was extremely heavy as noted by Burdick (p. 58): The "average faculty member taught three lower division and two upper division courses each semester. Burdick, p. 59, stated that "instructors faced over 250 student contact hours each week....Office hours, tutorials, committee assignments, and the sponsorship of extra-class activities added to the crowding of his time. Somewhere in the timetable there had to be room for study and preparation. Then research?" Burdick (pp. 59-60) also noted, however, that there "were many dedicated instructors for whom teaching was more than an occupation. They combined a very strong and therefore effective concern for their students with an enthusiasm for their subject that apparently counted for far more than impersonal measures of scholarly circumstance. This was a tradition, as described earlier, that had grown up in the first years of the college."

Burdick also commented in the changing face of faculty members during the 1950s and 1960s: "The majority of the faculty were products of an early set of values which stressed devotion to the school and fitting into

the community. As former public school teachers, they were strongly institution-oriented and conservative in their social attitudes. In their academic role, they saw themselves as teachers rather than as professionals in an academic field (p. 101)." And newer faculty members had, according to Burdick "more specialized scholarly interests and a loyalty to those interests....If ties to the student and college were weak for the new breed of faculty member, they were also tenuous in his relationship to the community. Conway was not home; and he could leave it as quickly and without any more sense of sadness than he would feel leaving ASTC." Burdick further commented (p. 324): "For most of the faculty, ASTC-SCA-UCA became an employer, not a community. The institution existed to provide pay for their efforts, a place for their expertise, and some sort of ambience for whatever professional, intellectual, or grouping of kindred interests they might share with others." Indeed, these "new recruits didn't choose teaching; they chose the subject...." (p. 327, Burdick).

Academic Matters

Burdick, as chief academic officer, led the campus to a number of improvements in academics. For example, Burdick, p. 216, described a change in the college with the addition of the Honors Program: "The teachers college climate which tends to reinforce the natural adolescent inclination to downplay excellence and to disparage the least hint of studiousness had to be countered by making improved achievement worthwhile. An honors program was begun in 1961." Also, Burdick (p. 303) describes a new policy that came about in the late 1950s: "It wasn't until 1959 that the last student was graduated with less than a "C" average computed carefully." Also, on p. 344, Burdick stated that "there was a span of years when I was able to slow rampant final grade changes (almost always upward) only by demanding direct evidence that could justify the move." And on p. 345: "Our Dead Week was a farcical lapse. Not only was a tone of all play and no study for final exams set by a gleeful majority, but too many of the faculty entered into the general letdown by bootlegging meaningless final non-tests in

advance of the examination period and even absenting themselves from in-office helpfulness and exam proctoring." Burdick (p. 93), also shepherded the approval of a new requirement for "seniors to earn twenty-four of their last thirty hours in residence at ASTC."

Burdick had a number of compelling statements when it came to academics at ASTC, and was in a position as chief academic officer for for 21 years (1954-1975) so as to have significant insights into academics at ASTS and SCA, many of which are very applicable to this day:

- On the requirement of a minor and its purpose: "All major curricula, except elementary education, home economics, and music, required their students to pursue a second program of study in another field not necessarily related but with a much reduced total of semester hours. The rationale for offering these truncated curricula was to provide the prospective teacher with another certificated subject under the low ceiling of total hours required for graduation (p. 45)."
- On the lack of preparedness of many incoming freshmen: "The high school education of most students was deficient in many solid subjects, overloaded with vocational studies, and lacking in satisfactory levels of accomplishment. As a consequence, the college was compelled to offer courses that were more appropriate for high school (e.g. trigonometry) and which were not too demanding academically. Even these efforts to ease the transition to college and to fill in the gaps of student preparation failed to mesh with the performance capabilities of well over a third of the freshman class (p. 48)." And on p. 49: "The manifold problems associated with poor freshman preparation and high academic mortality were not confined to the first year. They made it difficult to steepen the educational gradient at all levels." On p. 57: "The poor preparation of some entering students in the sciences and mathematics, for example, made it necessary to begin their introductory studies at a level so elementary that by

the time they had completed the total hours required for a major they had yet to reach a degree of competence appropriate to the baccalaureate degree."

- On the role of the sciences in general education, p. 65: "The sciences offered non-laboratory lecture and demonstration courses for those who would go no further in these fields. The physical science course which seemed interdisciplinary was in fact a double decker, with chemistry and physics each occupying its separate half in an otherwise integrated whole....In designing these courses, the departments involved served their own purposes as well as those of general education: they rid the introductory laboratory courses of the many not prepared for them."
- On the weakening of general education on behalf of faculty and departments, pp. 67-68: "Courses that met general education requirements were too often viewed as opportunities to recruit students for their major and minor programs....As a result, the various departments seized upon this opportunity, with the aid of senatorial courtesy in the curriculum committee, to add courses from their curricula to the list of alternatives in general education, with easy rationalizations of merit offered in support of their moves. By these means, as has already been indicated, the faculty further adulterated the forty-eight-hour general education program."
- On problems with extension courses, offered frequently during this time period, and indeed similar to concerns to what is faced today by faculty when it comes to on-line learning: "Faculty inattention permitted a host of evils to grow. Students learned that they could copy directly from the textbook or other sources, using language which was obviously not theirs, and escape attention" (Burdick, p. 75). In the 1950s, ASTC responded to this concern by limiting "the amount of non-resident credit to one-fourth of the total offered for graduation and required frequent

interspersal of residence and non-resident study. Also, all of the senior year had to be done in residence." (Burdick, p. 76).

Several changes to scheduling occurred when Burdick became dean in 1954 (Burdick, p. 288): Our old system of three fifty-minute periods placed in staggered pairs through a five-day week was replaced in 1954 by fifty-minute class periods on MWF and ninety-minute periods on TTh." As part of this change in scheduling, there was the creation of "an X-period following the noon hour on Tuesdays and Thursdays to be reserved for all-college convocations, group meetings, and counseling." Burdick further commented on scheduling (p. 288): "There seemed to be no way to withstand that universal relish for banker's hours. Midmorning and early afternoon classes were almost adamantly demanded by faculty and students. And, naturally, the weekend had to begin at noon on Friday."

Student Affairs

Burdick commented on the changing nature of the campus during this time period (p. 9): "The 1950's and 1960's saw a radical revolution in the nation's social and moral patterns which questioned the relevancy of all institutions and seriously weakened authority in all areas of society. Higher education was very notably affected."

The first African American student at ASTC was Thomas Embry, as pictured in the 1957 Scroll, which covers the 1956-57 academic year. (Bryant, p. 73). Harvel Wright taught mathematics and physics from 1956-58 and had Embry in class. In a personal interview, Wright recalls that he was approached by the ASTC administration with the question of whether a black student in his physics class would "offend" him, to which Wright responded "of course not!" Wright then wondered how he would handle the lab component of the course since he had the students work in pairs while in the lab. Embry was absent during the first lab period and Wright took the opportunity to ask his class for a volunteer to be Embry's lab partner; Wright was happy to see that many of his students volunteered to be Embry's lab partner. The first African American student to graduate from ASTC was Joseph Normal Manley, who graduated at the end of spring semester of 1958. Manley then earned a masters degree from the University of Arkansas and a doctor of optometry from Ohio State University, returning to Arkansas to practice optometry (Bryant, p. 73). During a personal interview, Dennis Faulk (1958 chemistry alumnus) stated that he graduated from ASTC in the spring of 1958 as well, and recalls the commencement ceremony in which Manley participated.

Burdick pointed out that social changes were making their way to ASTC, albeit slowly (p. 116): "Moreover, the college was expected to exhibit a strong church influence, despite its state support. As a consequence, no group activities could be scheduled at the college on Sunday or Wednesday night to conflict with church services. Dances had to end at midnight Saturday. The practice of holding weekly assemblies for students and faculty continued in 1954, but these were no longer termed 'chapel' and religious observances had been discontinued."

Burdick describes the nature of the student body (pp. 112-113): "ASTC students were generally far more at home with people and things than with abstract ideas....The tradition of friendliness was of inestimable worth to students. Knowing others and being known by most students and faculty, having a sense of belonging, feeling that others care, and realizing that the instructors were always willing to help, assisted greatly in the students' personal and educational development." And, according to Burdick, p. 335, faculty and staff at ASTC responded with just what the students needed: "Yet despite the painful turnover of lower division students, the drawing away of the faculty, and the more narrowly centered interests of advanced students, the campus was still a friendly place....Whatever it was, the boast of being 'The Friendliest College in Arkansas' that had appeared at the bottom of the school's stationery for so many years still held true in some ways."

There were some interesting traditions among the students during this time period, including the freshman beanie. The freshman beanie was a

student tradition through the end of the 1964-65 academic year. The beanie "had to be worn by freshman, at all times, until the homecoming football game" ("From the UCA Archives: Freshman Beanie and 1960s Student Life," April 8, 2012 *Log Cabin Democrat*). The purpose of the beanie, Bryant notes, was to remind the student that the freshman is no longer as important as compared to being a high school senior, and that now the beanie, colored green, is a reminder that each new student is a "green freshman." The beanie had a number on it that designated the year that the freshman was supposed to graduate four years later, such that a freshman entering in 1964 would have 68 on the beanie. Dress codes for students were of interest during this time period as well, as noted by Jimmy Bryant in a memo to one of the authors, dated July 21, 2014:

Dress Codes for Women: Women students were not to leave their residence hall with their hair in rollers. Girls could go to Saturday breakfast with their hair rolled, if the hair was covered by a head scarf.

Shorts were never worn on campus, at any other time, except to the tennis courts, and then they had to be covered by a skirt or a coat while crossing the campus. Long pants could only be worn off campus to picnics, skating, horseback riding, and boating.

By 1968 women could wear shorts on campus on Saturdays or Friday if the female student were leaving the campus and driving directly home without stopping. According to the 1968-1969 Handbook for Students, "Skirts and blouses, skirts and sweaters, and dresses are the appropriate dress for class wear, on campus and downtown. Pants dresses, if properly selected and becoming to the individual may be worn. On Friday afternoon if you leave your own hall, go directly to your car and leave for home without a stop at another campus building or in Conway you may wear shorts or slacks. You may return to the campus and go directly to your Residence Hall as you are dressed when you leave home."

Dress Codes for Men: Wearing white T-shirts as outer garments in the Student Center, to classes or to the Dining Hall was discouraged. Men

were not to wear jeans to the Dining Hall for the noon meal on Sundays. Shorts were not to be worn to classes or to the library except on Saturday.



1959 picture of students in chemistry lab.

Anne Butler, a chemistry major at ASTC from 1951-53, in a personal interview, commented on how hard it was, financially, for students to go to school during this time period. While at ASTC, she worked three jobs, ranging from \$0.50-\$1.00 per hour, to pay tuition that was about \$47 per semester. She stated they "had to earn every dime" and that there were no student loans. Anne transferred from ASTC to the University of Missouri in 1953. She said that they did everything they could to convince her not to major in chemistry because she was a female. In fact, in her physical chemistry class at Missouri there were 79 students and two of them were female, and that number went down to one female, Anne, after the first semester. In fact one of her professors announced to the class that "no female ever gets an A in my class." Anne proceeded to do A work yet was given a B in the class. Anne went on to graduate with a BS in Chemistry at the age of 19 from the University of Missouri in 1954, the only female of the 13 graduating seniors, and later earned a masters degree in physical/inorganic chemistry from the University of Southern Mississippi. Anne's work life primarily involved teaching at the high school level. She won the Chemistry Teacher of the Year Award in the state of Florida in 1997. While she was teaching in Florida, she completed a summer workshop in 1986 at UC Berkeley where she met Glenn Seaborg. She recalls Seaborg had retired as president of Berkeley, but that he would still come into his office while he was in his 80s. Seaborg told Anne Butler to "never to apologize for being a high school teacher because you are the source of our university students!" Anne commented in a personal interview that she is very happy things have changed for women in chemistry.



2013 pictures of chemistry faculty and graduating chemistry majors, showing the diversity of faculty and students.

Faculty

The department heads for the Department of Physical Science during the period of 1950-1965 were (pictures and biographies of each department head are listed in the next section):

1950-1953 Patton

1953-1955 DeLoach

1955-1957 Easley

1957-1958 Selvidge (acting head)

1958-1964 Smith

1964-1965 In 1964, the Department of Physical Science was split into the Department of Chemistry and the Department of Physics. Faril Simpson was Interim Head of the Department of Chemistry and Ralva Bass was Interim Head of the Department of Physical Sciences during the 1964-1965 academic year. The 1965 Scroll, published in the spring semester of 1965, refers to the newly-formed department of physics as "set up this year as a separate department after the division of the physics and chemistry departments took place." Denver Prince was the founding permanent Head of the Department of Physics starting in 1965 and Jerry Manion was the founding permanent Head of the Department of Chemistry, beginning in 1965 as well.

Here are pictures of the physics and chemistry faculty members during this time period, as well as a brief description of each person:



1951 picture of H. W. Patton, Chemistry.

H. W. Patton, Ph.D. (1950-53) Patton came to ASTC fresh from graduate school, having earned a Ph.D. from Vanderbilt in 1950. He succeeded Cordrey as Head of the Department of Physical Science and was also named Professor of Chemistry. He was a physical chemist and took over teaching P-Chem from Ed Radley. He left after three years and took an industrial position with Tennessee Eastman in Kingsport, TN.

Bob Hankins (1951 ASTC alumnus) remembers him favorably. When Bob accepted a job at Oak Ridge National Laboratory upon completion of his Ph.D., he

contacted Patton and they visited.



1951 picture of Will S. DeLoach, Chemistry.

Will S. DeLoach, Ph.D. (1953-55) DeLoach served as Professor of Chemistry and Head of the Department of Physical Science. Dennis Faulk (1957 ASTC alumnus) took general chemistry from Dr. DeLoach and remembers him as "very competent, efficient and congenial, although not overly outgoing and enthusiastic." Dennis noted that his instruction certainly contributed to the foundation he needed to proceed. Interestingly, Dennis noted that near the beginning of the course, he had an advanced student teach the use of a slide rule. Dennis also commented that Dr. DeLoach "always had an extraordinarily

difficult question/problem on his exam that had a credit of 1 point; thus, it wasn't easy to have a perfect score. Also, it gave the student something to do if the other part of the exam was completed."



1954 picture of Glen Powers, Physics.

Glen Powers, M.N.S. (1953-59) Powers served as Assistant/Associate Professor of Physics and Physical Science. Harvel Wright (oral interview) took Powers' position from 1956-58 so that Powers could complete a Ph.D. According to Denver Prince (oral interview), Glen left ASTC at the end of the 1958-59 year, creating the position Denver was hired to fill. Denver took an engineering math class with Glen at Oklahoma State University and noted that "One quirk was his allergy to chalk dust that caused him to move his chair close to the door during class to avoid breathing the dust. I don't know how he could teach without using chalk!"



1956 picture of R.F Selvidge, Chemistry.

R.F. Selvidge, M.A. (1955-58) Selvidge was Head of Physical Science and his specialty was organic chemistry. Dennis Faulk describes Selvidge as "a more jolly fellow, and most competent. His teaching technique was more relaxed but effective. There were probably 15-20 in the organic class." Selvidge and Harvel Wright (Instructor of Mathematics and Physics from 1956-59) were good friends, and fished together on Lake Conway, mostly for crappie. One day, they found an unclaimed boat together and kept it. They asked around about who might own the boat and after giving the appropriate amount of time, they kept it. Harvel and Carleta Wright took that boat to Knoxville

with them and in a 2015 interview said they looked like the Clampetts with the boat on top of their car and a trailer in tow. Selvidge served as the Acting Head of the department during the 1957-1958 academic year. According to the June 19, 1958 minutes of the ASTC Board of Trustees, Selvidge passed away on May 27, 1958. At this meeting, the Board passed a resolution recognizing him as "a faithful staff member, fine husband and father and an outstanding citizen."



1956 picture of W.K. Easley, Chemistry.

W. K. Easley, Ph.D. (1955-57) Easley served as Professor and Acting Head of Physical Science and he taught organic chemistry. He is remembered by Dennis Faulk (personal interview) as a strict disciplinarian: "For example, the instant a student opened his/her locker, the goggles had best be donned immediately and they better not come off until the very end. Easley left for another position at the end of the semester, so we gave him a gift. The student we

selected to present the gift approached him with the gift behind his back. He raised his goggles to make the presentation and immediately got 'chewed out' from

top to bottom. He then put on his goggles and sheepishly made the presentation. Easley was most appreciative and probably quite embarrassed. Easley made sure students knew some organic chemistry. He prepared exams and gave a series of standardized exams during the semester. He expected students to be able to answer questions of greater depth than was addressed in class. As a result, students did expend more energy preparing." Dennis Faulk, Jerry Manion and Bob Hankins believe that he died at a relatively young age. Easley served as department head for the two years he was at ASTC.



Robert L. Sublett, Ph.D. (1955-56) Associate Professor of Chemistry. The November 8, 1955 minutes of the ASTC Board of Trustees states that he was hired "at a rate of \$458.33 per calendar month to be paid from Ford funds."

1956 picture of Robert L. Sublett, Chemistry.



1959 picture of Allen Robinette, Chemistry.

Allen Robinette, M.S. (1956-64)

Instructor/Assistant Professor of Chemistry. Allen was the son of C.V. Robinette, long-time chair of biology at ASTC, and grew up only a few blocks from the ASTC campus. He was a neighborhood friend of Bob Hankins, a 1951 alumnus. Robinette's family were close friends with Harvel Wright (1956-58 ASTC faculty member) and his family. Anne Butler (oral interview) said that there were three chemistry graduates in 1953: Bob Butler, Richard Scalon, and Allen Robinette and all three of them went to chemistry graduate school at the University of Arkansas. He started as an instructor with a B.A.

degree from ASTC (1953) and did some graduate work at UA-Fayetteville. He received his M.S. degree a year later. He left in 1964 to return to Fayetteville and completed his Ph.D. there. Allen was then employed by a pharmaceutical company in north Arkansas. Allen taught physical chemistry and during the 1964-65 academic year there was no one on the staff to teach this course so students enrolled in the course offered at Hendrix. Art Hoyt (personal e-mail) recalls having Allen Robinette for general chemistry and remembers that Allen had one finger missing as a result of an explosion during his work in industry. Denver Prince (personal interview) noted that Allen's daughter taught geology for the physics department in the Lewis Science Center. According to Ruthanne Hill, Allen Robinette's daughter, in an e-mail dated July 28, 2015, Allen hosted Denver Prince, Ralva Bass, and Faril Simpson in his home and they would play bluegrass music together – an early 1960s precursor group to The Professors!



Charles V. Robinette, middle, Biology, with his sons Allen (right, faculty member in Chemistry) and Charles Robinette, Jr. (left, graduating senior in biology) at 1957 commencement.



Harvel Wright (1956-58) Instructor of Mathematics and Physics (source: Board of Trustees meeting, June 19, 1958). Harvel Wright served as an instructor of Mathematics and Physics at ASTC from 1956-1958. Harvel Wright (2015 oral interview) grew up on a farm near Pine Bluff, Arkansas and delayed his entry as a

1958 picture of Harvel Wright, Physics and Mathematics.

student at ASTC until January of 1951 so that he could help his dad harvest cotton (Harvel's dad expected Harvel to go to college and got him started at ASTC by paying his initial tuition). While a student at ASTC,

Wright worked his way through college by working at the college cafeteria. He graduated from ASTC in 1954 with a BS in Mathematics. Harvel was 23 years old when he began his faculty position at ASTC and that year when he participated in a blood drive at ASTC, he looked so young (see his picture) that he was asked whether he was a freshman! He replaced Glen Powers for a two-year period while Powers left to pursue a Ph.D. After leaving ASTC, Wright earned a Ph.D. in theoretical mathematics from the University of Tennessee in 1967 and then became a very successful research scientist (specializing in theoretical physics) at Oak Ridge National Laboratory, publishing over 100 papers. Wright remained at ORNL until his retirement in 1989. While at ORNL, he noted that, unlike what you would expect, the theoretical physicists were very practical and worked on their own cars whereas the applied physicists did not attend to such practical matters outside of work. Harvel and his wife, Carleta (a Conway native whose father attended ASNS), have two children who have the Ph.D. degree in Physics. Nancy Wright Grady graduated from the University of Virginia at Charlottesville and Michael Wright graduated from Duke. They also have a grandson who is working on a doctorate in Biochemistry at Princeton.



1959 picture of Joseph Smith, Chemistry.

Joseph Smith, Ph.D. (1958-64) Professor and Head of Physical Science. Joe was from Louisiana and had a Ph.D. degree in Analytical Chemistry from LSU. He also taught organic chemistry at ASTC. Art Hoyt (began at ASTC in 1958 as a biology major and eventually joined the chemistry faculty) indicated in a personal e-mail that Joe was a charismatic person and apparently popular with students and other faculty members. Art also relayed that Joe was a Cajun who made and drank many a pot of Chicory coffee. Joe left ASTC and moved to McNeese State in Lake Charles, LA. Interestingly, Bob Hankins (1951 alumnus) was chair

of the department of chemistry at McNeese State when Joe Smith arrived there. Bob tells a good story about how he asked Joe whether he insisted on teaching Quant and Joe said no, I'll teach whatever needs to be taught. Bob responded, "good, that's my course!" Jerry Manion and Art Hoyt credit Joe Smith for the design of the Lewis Science Center, which apparently was based on a building on the LSU campus at the time. Denver Prince pointed out he was active with Boy Scouts. Prince also noted that he spoke with a very thick Cajun accent (personal interview).

Physical Science

The courses in chemistry and physics aim to contribute to the general education of students by giving them a better understanding of the physical phenomena in our daily experiences. Through work done in the laboratories of this department students gain an appreciation for, and a broader working knowledge of these phenomena. The department furnishes the necessary background for professional students and for future teachers of science. Also it prepares departmental majors for graduate work in physics and chemistry and for future industrial employment, engineering, medicine, and other allied fields.



Dr. Joseph Smith, Ph.D. Professor, Head of Department



Ralva Bass, MS Assistant Professor of Physics



H. L. Minton, Jr., MA Assistant Professor of Physics



Denver Prince, MSE Assistant Professor of Physics



Faril Simpson, MA Assistant Professor of Chemistry

Students work in chemistry lab.



1963 Scroll Picture of the Department of Physical Science



1963 picture of Ralva Bass, Physics.

Ralva Bass, M.S. (1958-86) Bass taught physics and mathematics. Denver Prince (personal interview) stated that Bass served in the engine room on a destroyer in World War II and that the ship got hit once with a kamikaze plane but that it did not sink them. Prince also relayed that prior to joining the faculty at ASTC, Bass had taught high school math, with the last teaching position in Newport, Arkansas. An interesting comment about Bass from Denver Prince (interview) was that he could write with either

hand on the blackboard, and sometimes students "accused him of writing with both hands at the same

time!" Bass played guitar in the band The Professors. In 1964, he served for one year as the interim chair of the newly-formed Department of Physics. He attended the University of North Texas for one summer for a nuclear program for teachers. He also coached the bowling team.



1963 picture of Faril Simpson, Chemistry.

Faril Simpson, M.S. (1958-87) Faril taught chemistry, physics, and physical science. Faril grew up in Grant County, south of Little Rock. He left high school to enlist in the navy during World War II and completed high school after the war. He enrolled in Little Rock University (now UALR) and graduated with a degree in zoology. After an unsuccessful attempt at medical school, he completed an MS degree and taught at Hall High School that had just opened. He returned to graduate school at the University of Texas in 1965 and ultimately completed an Ed.D. degree at the University of Arkansas. Faril taught physical science, freshman

chemistry and geology. He was a prominent member of the Professors Band and was active in old-time music circles across the state. He also performed as a solo artist and was very popular locally for the songs he wrote and his skill as a storyteller. Carl Harris, a 1974 alumnus of the State College of Arkansas Department of Chemistry, stated that "Faril Simpson had that deep voice and he loved the older, not even bluegrass songs, maybe folk songs from the Civil War." Simpson served for one year as interim chair of the newly-formed Department of Chemistry during the 1964-1965 academic year. As noted by Denver Prince, Faril taught geology, a course normally offered via Physics, prompting him to say "back then, we shared everything, stockroom included!" Denver also reported that Faril, after he retired from here, taught Spanish in high school (personal interview). Jerry Manion enjoyed telling a story about Faril. Apparently Faril told Jerry about a "new assistant professor" who "volunteered for every committee assignment that came up and then did everything he could to be a complete ass during the meetings. After a few years he was never asked to serve again."



1963 picture of Denver Prince, Physics.

Denver Prince, M.S.E., Ed.D. (1959-94) Denver grew up in Magnet Cove, AR and received a B.S. in chemistry degree with a minor in physics from Henderson State Teachers College. Denver taught high school physics, math, and chemistry for five years before joining ASTC. While teaching, he went to University of Utah and got a masters degree in science teaching, mostly physics, and then came back and taught another year of high school. He spent a summer at Reed College in Portland and completed courses in physics there. He was in graduate school, taking chemistry and physics, at

Peabody/Vanderbilt when President Snow and Dean Burdick flew to Nashville and interviewed him at the Nashville airport. He joined the ASTC faculty as assistant professor and taught general chemistry as well as physical science and courses in physics. Denver was on leave for two years (1963-65) to complete an Ed.D. degree at Oklahoma State. Upon completion of the degree he returned to ASTC and assumed the position as chair of the newly formed Department of Physics and served in this capacity for 28 years. Denver played bass for the Professors band and as a side interest Denver began investing in and managing rental property in Conway. He also owned the store at the corner of Bruce and Donaghey for some time, which incidentally was owned by Bob Hankins' (1951 chemistry alumnus) family from 1945-1947 and was the only place that served food (other than the college's cafeteria) near the campus for many years. He was financially quite successful in the rental business and shared his financial success in a very generous way with UCA. Having once served as cross country coach, Denver has always been a strong supporter of UCA athletics and the old gymnasium currently used for women's volleyball and the Athletic Training program was renamed the Prince Center in honor of the Prince family.



1963 picture of H. L. Minton, Jr., Physics.

H. L. Minton, Jr., M.A. (1963-64) Son of H. L. Minton, Sr. who wrote "ASTC, SCA, UCA, 1954-1975: A Deaning Review," a vital resource for this history of chemistry at UCA. H. L. Minton, Jr. attended ASTC from the spring of 1951 through the spring of 1952, and transferred to the University of Texas where he earned a bachelors of arts degree in physics in 1955. He then went into the army and then back to the University of Texas for graduate school, completing a masters degree in mathematics. He returned to ASTC in 1963 to teach

physics courses during Denver Prince's absence and remained here through the summer of 1964. He noted in a phone call on July 10, 2015 that he found students at ASTC eager to work on things, and they worked on an old telescope with him during the summer of 1964. He then accepted a faculty position at Memphis State University that began in 1965 and he remained there until he retired in 1997.



1965 picture of Earl Riddick, Chemistry.

Earl Riddick, M.S. (1963-65) After his short tenure at ASTC, filling Denver Prince's position while he was on leave, Earl began med school in the fall of 1965 and practiced as a pathologist in northwest Arkansas for a number of years. He accumulated a collection of prehistoric pottery that was later donated to UCA. Earl told a story that illustrated the profound effect that a teacher can have on a student without knowing it. He overheard his elementary school teachers talking about how he was not as bright as the other students. He accepted this and was never a good student in

public school. During time spent in the army, he realized that he was smarter than the other guys in his unit and gained enough confidence to attempt college. He succeeded academically from that point on.



1959 picture of Donald E. Rickard,

Donald E. Rickard, M.A. (1964-65) Donald was hired, along with Earl Riddick, to cover Denver Prince's classes while Denver was on leave. After teaching physics at ASTC for one year, Donald earned the MSE from ASTC in 1966 and then became a faculty member at Arkansas Tech University (now Professor Emeritus) from 1967-1998. At ATU, he taught physics, astronomy, chemistry, physical science, and radiation physics. He also served on a panel that drafted the original emergency plan for Nuclear One in Russellville.



Limuel Parks (1964-67) Lim was the pastor at the local Episcopal Church. He taught part-time to help meet the demand for chemistry classes. This typically involved teaching one section of general chemistry with lab.

1965 picture of Limuel Parks, Chemistry.

Facilities

When originally established as a separate department in 1964 (at which time the Department of Physical Science was split into the Department of Chemistry and the Department of Physics) the chemistry department was housed in the basement of the Cordrey Hall. From 1950 to 1966, the Cordrey Building housed science, including Chemistry, Biology and Physics. Home Economics also was in the Cordrey Science Building during this time period.



1960 aerial photo of the campus, with Physical Sciences located in the Cordrey Building (current site of the Burdick Business Administration Building).

This is a rough floor plan (drawn by Jerry Manion) for the chemistry department's physical layout in the basement of Cordrey Hall during the 1965-66 academic year when Dr. Jerry Manion arrived. The footprint would have been roughly comparable to that of the current Burdick building. Total enrollment in the fall of 1965 was approximately 150 students in all classes. The department had three lecture rooms, one that held approximately 40 students and the other two that held 25-30 students. There were general chemistry, quantitative analysis, and organic/physical chemistry teaching labs. Although not expected of faculty, scholarly research was also conducted in these teaching labs. This facility also had three faculty offices and four stockroom/prep room areas as shown in the following sketch: This is a rough floor plan for the chemistry department physical layout in the basement of Cordrey Hall during the 1965-66 academic year. The footprint would have been roughly comparable to that of the current Burdick building. It is certainly not to scale. The freshman lab and the classroom shown in the middle of the building were larger than indicated and some things may be a little out of place, but this is pretty close.



Floor plan, sketched by Jerry Manion, of Chemistry space in the basement of the Cordrey Building.



Freshman Chemistry Lab in Cordrey Building in 1963.

The Cordrey building remained standing until it was torn down in 1973 when the Burdick Business Administration building was constructed in its place. According to an e-mail from Dr. Arthur Hoyt, who was a faculty member in Chemistry from 1969 to 1992 and graduate of Arkansas State Teachers College, chemistry classes were offered in the basement of Cordrey Hall during the late 1950s and early 1960s while he was a student at Arkansas State Teachers College. Dr. Hoyt described the conditions of the facilities for Chemistry as follows:

"It was a dungeon, replaced later by the Burdick Business Building. Stuff worked in fits and spurts; the placed flooded in the rain, and we walked on pallets at times. The lighting was weak, and the heat was as well. There was no air conditioning. Rusty pipes were the ceiling. The plaster was coming off the wall, and cracks in the foundation were evident. The place was strictly out of the dark ages." Hoyt said that Richard Collins once said, "When chemistry was in the old Cordrey building, the standard joke around was that scuba diving 101 was required before taking freshman chemistry." Burdick, p. 108, agreed about no air conditioning in Cordrey Hall: "Air conditioning had not arrived except in the auditorium and the president's office."



1950 picture of student conducting an experiment in the Cordrey Building.

Jerry Manion, who arrived on the ASTC campus in 1965, noted that the upper floors of the Cordrey Science Building housed Biology and Physics as well as Home Economics on the top floor. Consistent with Arthur Hoyt's statement, Jerry Manion noted that the building was quite dreary; in need of paint with bare concrete floors in many places and water drains in the floors like in a service station: "All of the furniture was old and there was no air conditioning. Heating was provided by radiators fueled by steam pipes that ran from the boiler room. The windows were small and were high in the wall because the facilities were largely underground. The one thing that everyone remembers is that there were two doors on the west side that entered the basement from the outside. Just outside of each door was a storm drain that was supposed to take rain water away from the building. Instead, because of the poor drainage in Conway at the time, the drains actually backed up and water would collect in the floor of the basement. We kept a number of the old wooden coke cases used for transporting glass coke bottles. When the water was on the floor we put these down as stepping stones through the worst parts." Jerry remembers that water would stand in the primary lecture room and students would sit in class with their feet in water puddles while taking notes.

Curriculum

Burdick, p. 19, commented on general changes in the curriculum during this time period: "By 1954, the process of developing non-teacher education programs was well advanced, but much of this progress had been accomplished by the simple device of the BA and the BS curricula hiving off from the BSE. The latter remained dominant and stamped the college. Still, a significant step had been taken in breaking away from the normal school heritage; and a new generation of academic identities was maturing." As part of this breaking away process, the BS was identified via one year of mathematics or a laboratory science and a BA required two years of a foreign language (Burdick, p. 19). Burdick, p. 21, noted that the Department of Physical Science offered the BSE, BS, and BA in Chemistry, General Science (either Chemistry or Physics Emphasis), Physical Science, and Physics, with 30-36 hours of required courses in the major. Burdick (p. 26) also stated that even though "Biology held an advantage over the other sciences in being a certifiable teaching field, it had to suffer along with them in being understaffed and without adequate facilities. Biology's larger staff (four, compared to two for chemistry and one for physics) did not mean greater depth for specialization; it only reflected heavier service responsibilities." Burdick, p. 45 also stated that: "Individually, Chemistry and Physics

lacked biology's enrollments and teacher certifiability and were forced to unite to form a recognized teaching field and to be linked as a single department. As was described earlier, the physical sciences' sophomore general education course missed the freshman enrollments and were thus denied those numbers and recruitment opportunities. Efforts to maintain academic standards further reduced an enrollment potential that was already low because of the nature of the subject matter. The small number of majors in either chemistry or physics and the limited services rendered to other programs made it difficult to justify program and staff expansion. And these factors worked backward to further lower appeal. Yet, handicapped by equipment that was seriously antiquated and very poorly maintained and housed in dark, cramped, and malodorous classrooms, this department somehow managed to prepare a number of outstanding students for graduate study and subsequent university professorships."

Anne Butler attended ASTC as a chemistry major from 1951-53 and reported (personal interview) that at that time, enough math was required such that chemistry majors were one class shy of a major in math. Chemistry majors also had to take two years of physics, two years of German, and the final exam in Intermediate Inorganic was written in German, and had to be completed by the students in German as well.

The 1963-64 Bulletin included descriptions of four majors in the physical sciences, including Chemistry, General Science with an Emphasis in Physical Science, Physical Science, and Physics. The Chemistry degree required:

CHEM 135-115 or equivalent, College Chemistry

CHEM 221-2210, Qualitative Analysis

CHEM 222-2220, Quantitative Analysis

CHEM 3300-3100, 3310-3110, Organic Chemistry

CHEM 435-415, 436-416, Physical Chemistry

And 6 semester hours of Chemistry upper-division electives. Other requirements included Calculus I, II, and III, German 141 and 142, and Physics 131-111, 132-112, and 441.

Also described were minors in Chemistry (for the BS degree only), which involved a minimum of 15 hours in chemistry and a minor in General Science, with 24 hours in biology, chemistry, and physics with 8 hours of each.

The aims of this new chemistry degree were described in the 1963-1964 bulletin as follows: "The courses in the fields of chemistry and physics have as their aim to contribute to the general education of students by giving them a broader working knowledge of, and a greater appreciation for, the physical phenomena in our daily experiences. The courses furnish the necessary background for professional students and for teachers of science, as well as preparing departmental majors for graduate work in physics and chemistry, or for industrial employment, engineering, medicine, and allied fields."

The following is a listing of changes in course descriptions during this time period.

In 1951, a new course added: Chemistry 440 Qualitative Organic Analysis. "A study of the methods used to identify organic compounds." Also, Chemistry 231 and 232, Qualitative Analysis, became Chemistry 241 and 242, Quantitative Analysis, involving gravimetric and volumetric analyses. Physical chemistry increased from one to two courses: Chemistry 445 and 446.

In 1952, lab fees were no longer listed in bulletin.

In 1954, a new course appeared: Chemistry 441 Special Problems in Chemistry "Individual work under supervision, designed to supplement regularly organized courses in chemistry and to serve as an introduction to research. Both laboratory and library assignments will be included. A student may register for one, two, three, or four hours in a semester; but not more than a total of four semester hours may be earned in this course. Prerequisite: Senior college standing and approval of the head of the department."

In the 1959 edition of the undergraduate bulletin, two new courses were added:

Chemistry 438 Advanced Inorganic Chemistry. "A study of modern theories of inorganic chemistry. Prerequisite: Chemistry 341 or its equivalent."

Chemistry 530 Laboratory Demonstrations in Chemistry. "A course in practical chemistry demonstrations for the science teacher. Both lecture, laboratory, and library work will be included. Prerequisites: Chemistry 141 and 142."

There were no changes until 1962 when there was the addition of three courses:

Chemistry 532 History of Chemistry I. "Designed to give the student of chemistry a better understanding and appreciation of the subject, beginning with the earliest concept of an element in the early Greek period and extending through the 'new chemistry' of Lavoisier."

Chemistry 533 History of Chemistry II. "Covers the period from the chemical revolution to the beginning of the twentieth century."

Chemisty 534 Modern Chemistry. "Theories and practices in modern chemistry."

In 1963, one new course was added this year: Chemistry 135-115 College Chemistry. "An accelerated course in general chemistry for students of superior background. Prerequisite: re-testing. Not open to students who have had Chemistry 131-111, 132-112, General Chemistry."