



of Chemistry



THE UNIVERSITY OF
TOLEDO

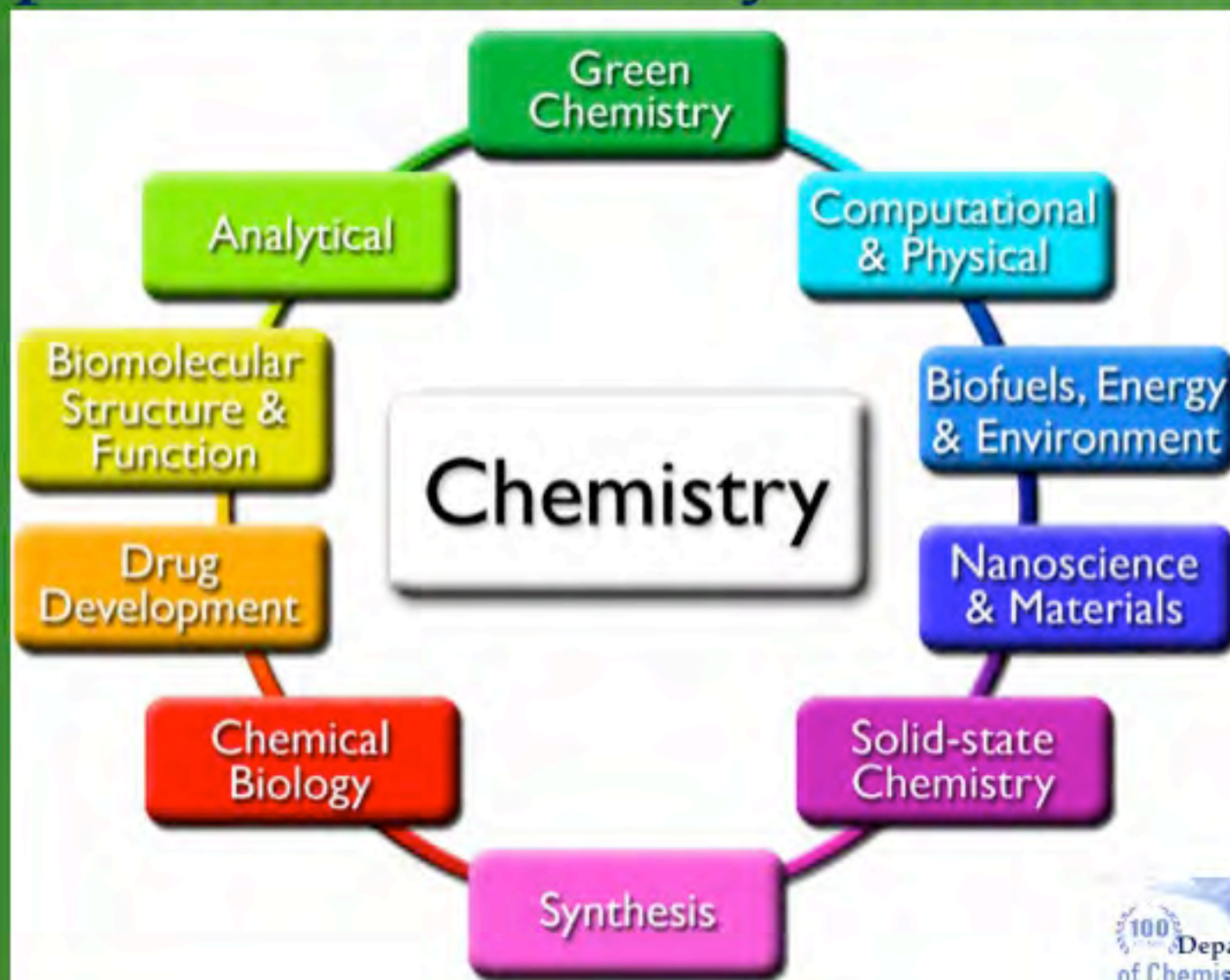
Department of Chemistry and Biochemistry



of Chemistry



Department of Chemistry and Biochemistry



A faint, light gray molecular structure is visible in the background, consisting of various atoms (represented by small circles) connected by lines, forming a complex network of bonds and rings.

**Remember
when...**

Mendeleev's Periodic Table of 1871¹

	I R ₂ O	II RO	III R ₂ O ₃	IV RH ₄ RO ₂	V RH ₃ R ₂ O ₃	VI RH ₂ RO ₃	VII RH R ₂ O ₇	VIII RO ₄
1	H 1							
2	Li 7	Be 9.4	B 11	C 12	N 14	O 16	F 19	
3	Na 23	Mg 24	Al 27.3	Si 28	P 31	S 32	Cl 35.5	
4	K 39	Ca 40	? 44	Ti 48	V 51	Cr 52	Mn 55	Fe, Co, Ni, Cu 56, 59, 59, 63
5	Cu 63	Zn 65	? 68	? 72	As 75	Se 78	Br 80	
6	Rb 85	Sr 87	? Yt 88	Zr 90	Nb 94	Mo 96	? 100	Ru, Rh, Pd, Ag 104, 104, 106, 108
7	Ag 108	Cd 112	In 113	Sn 118	Sb 122	Te 125	I 127	
8	Cs 133	Ba 137	? Di 138	? Ce 140	? 140	? 140	? 140	?, ?, ?, ?
9	? 140	? 140	? 140	? 140	? 140	? 140	? 140	
10	? 140	? 140	? Er 178	?? La 180	Ta 182	W 184	? 184	Os, Ir, Pt, Au 195, 197, 198, 199
11	Au 199	Hg 200	Tl 204	Pb 207	Bi 208	? 208	? 208	
12	? 208	? 208	? 208	Th 231	? 231	U 240	? 240	



1922 Science Building Construction



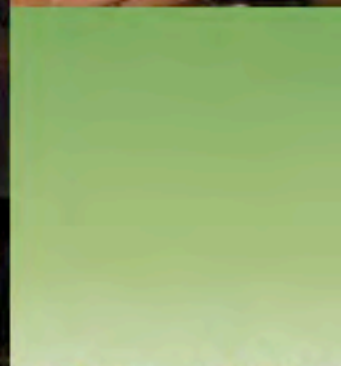
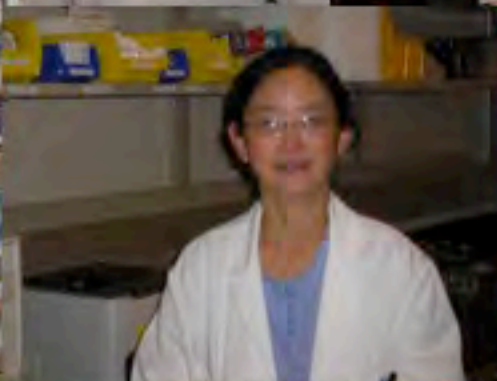
Chemical Research Laboratory

1914

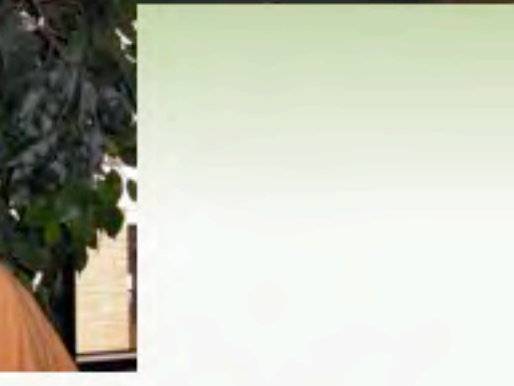
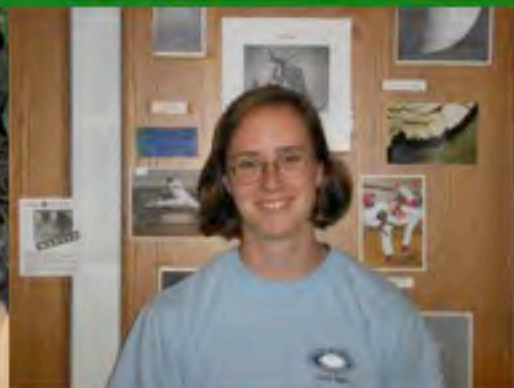


CHEMICAL LABORATORY.

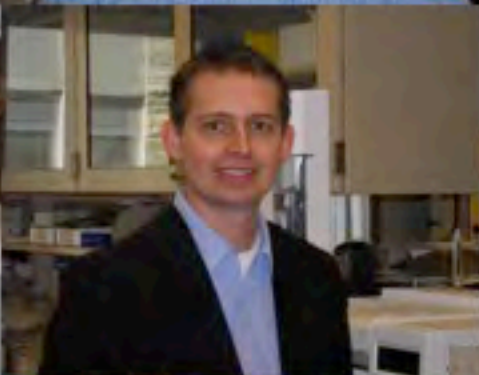
1914



2006 Faculty and Staff



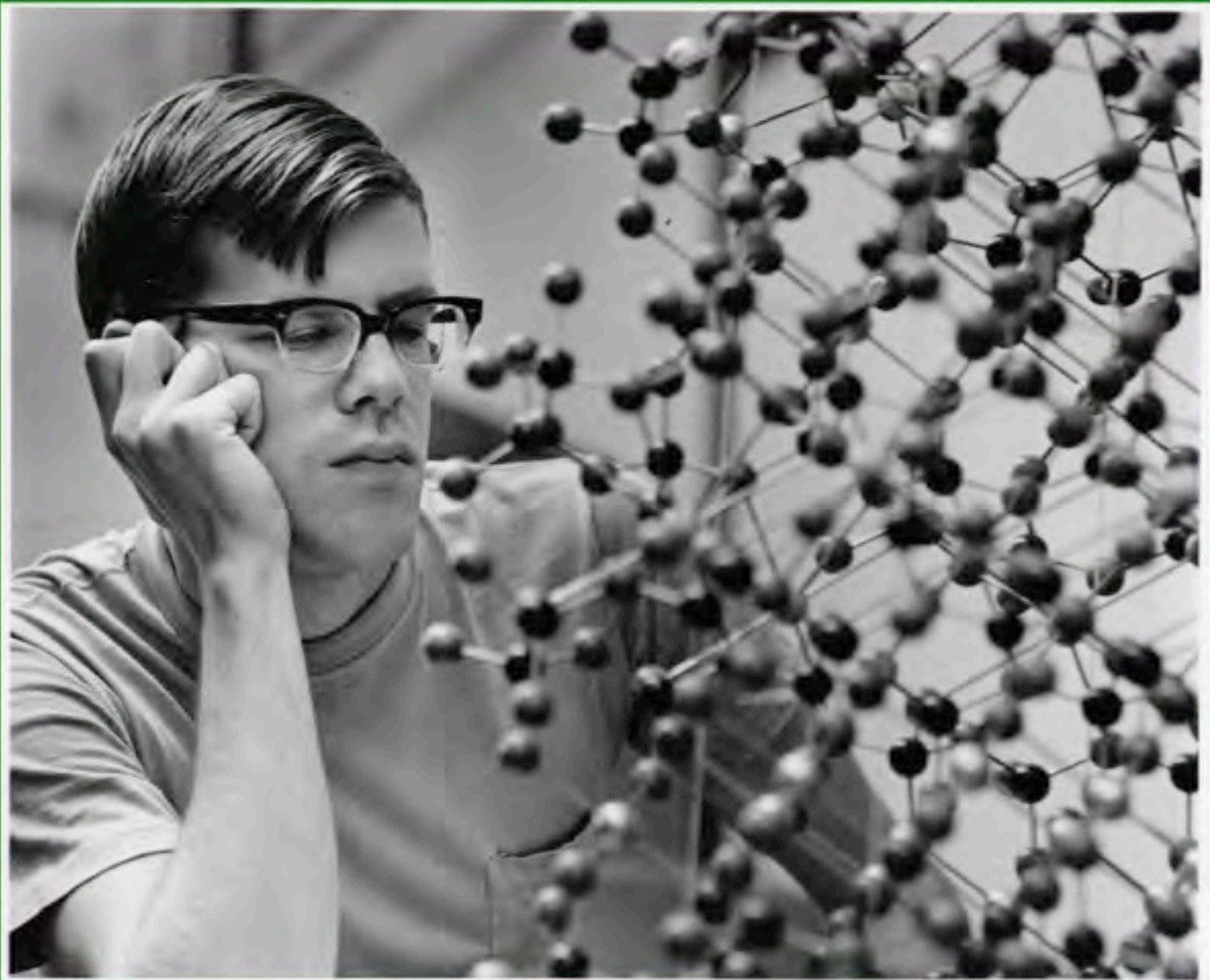
2006 Faculty and Staff



2006

1947





1960s



Harold Oddy 1936 and 1960s



1966 Bowman Oddy Labs Construction

Dr. Niedzielski
Dr. Brady
Jim Owens
Dr. Hans



1967 Christmas Party SINGERS

1967 Completed Bowman Oddy Laboratories





THE UNIVERSITY OF TOLEDO

TOLEDO, OHIO 43606 • AREA CODE 419 • 531-5711

COLLEGE OF ARTS AND SCIENCES
DEPARTMENT OF CHEMISTRY

September 5, 1968

Dear Chemistry Major:



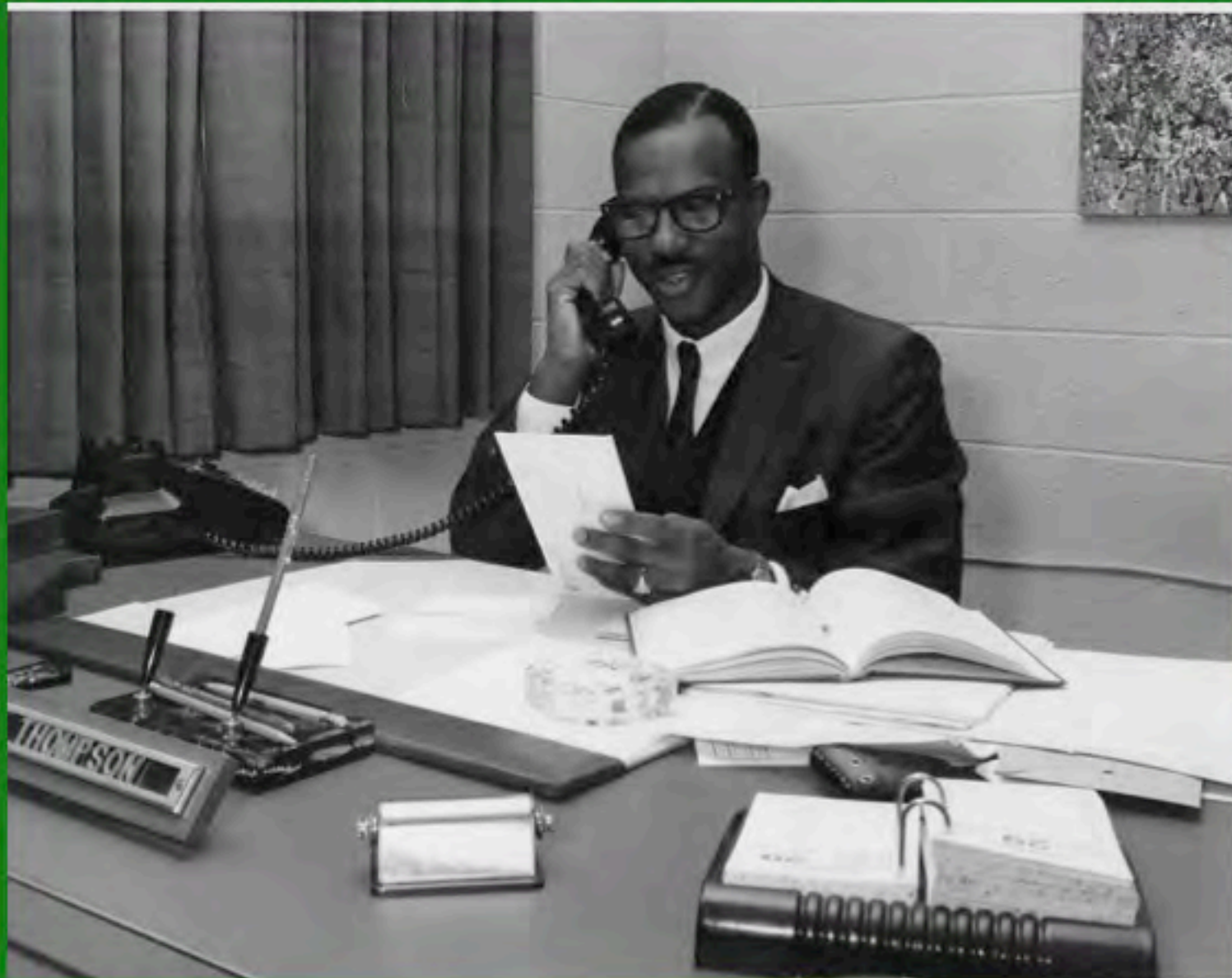
1968 Dept Picnic

1968

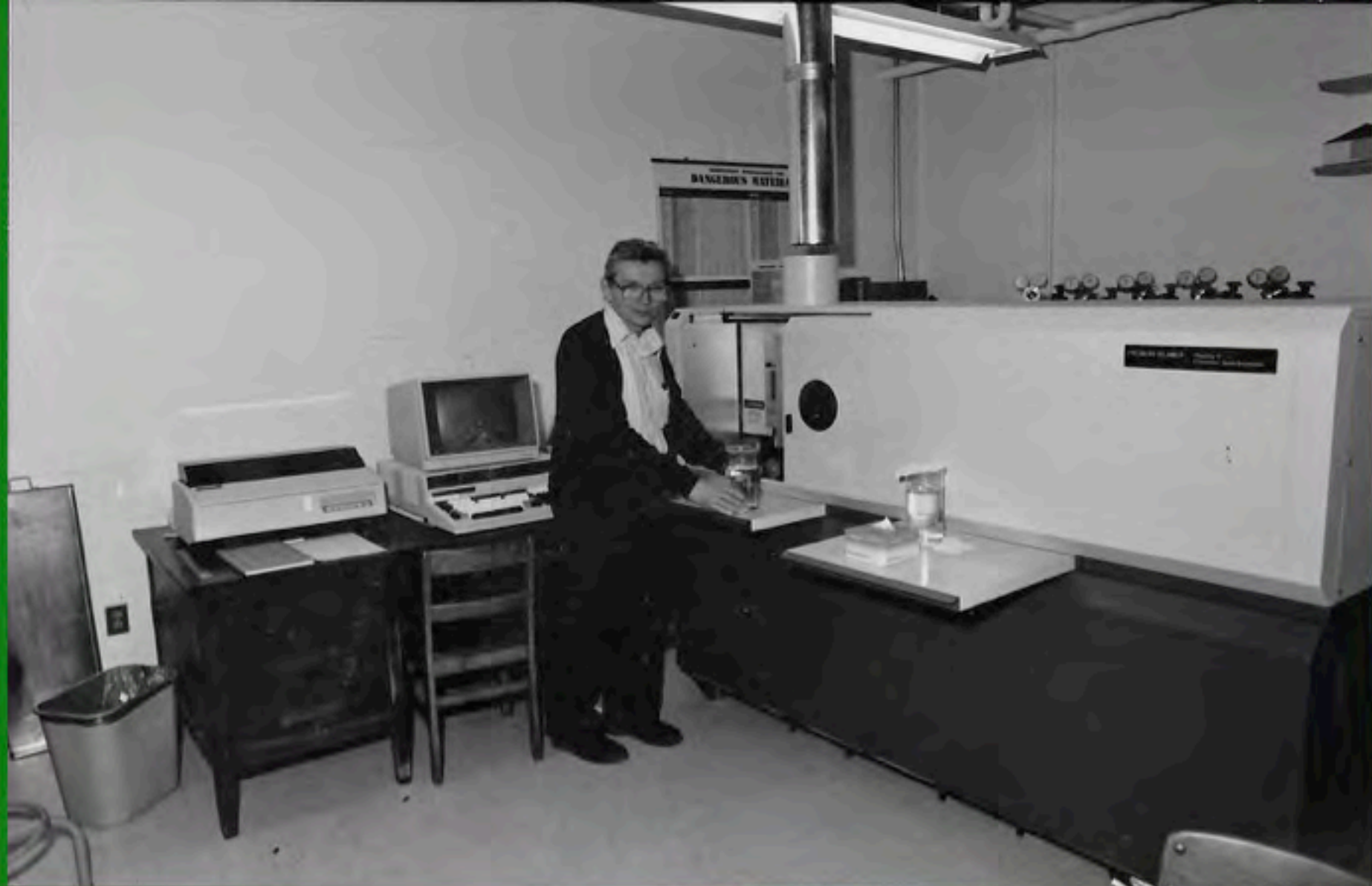




1969 BO Lecture



1970 Prof. Lance Thompson



1970s
Dr. Gordon Parker



1980s
Dr. Lenard Brady

1980s



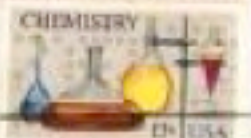
OFFICIAL
FIRST DAY
OF ISSUE



**A Century of
Modern Chemistry**



SERIES OF 1976



FIRST DAY OF ISSUE

100
YEARS



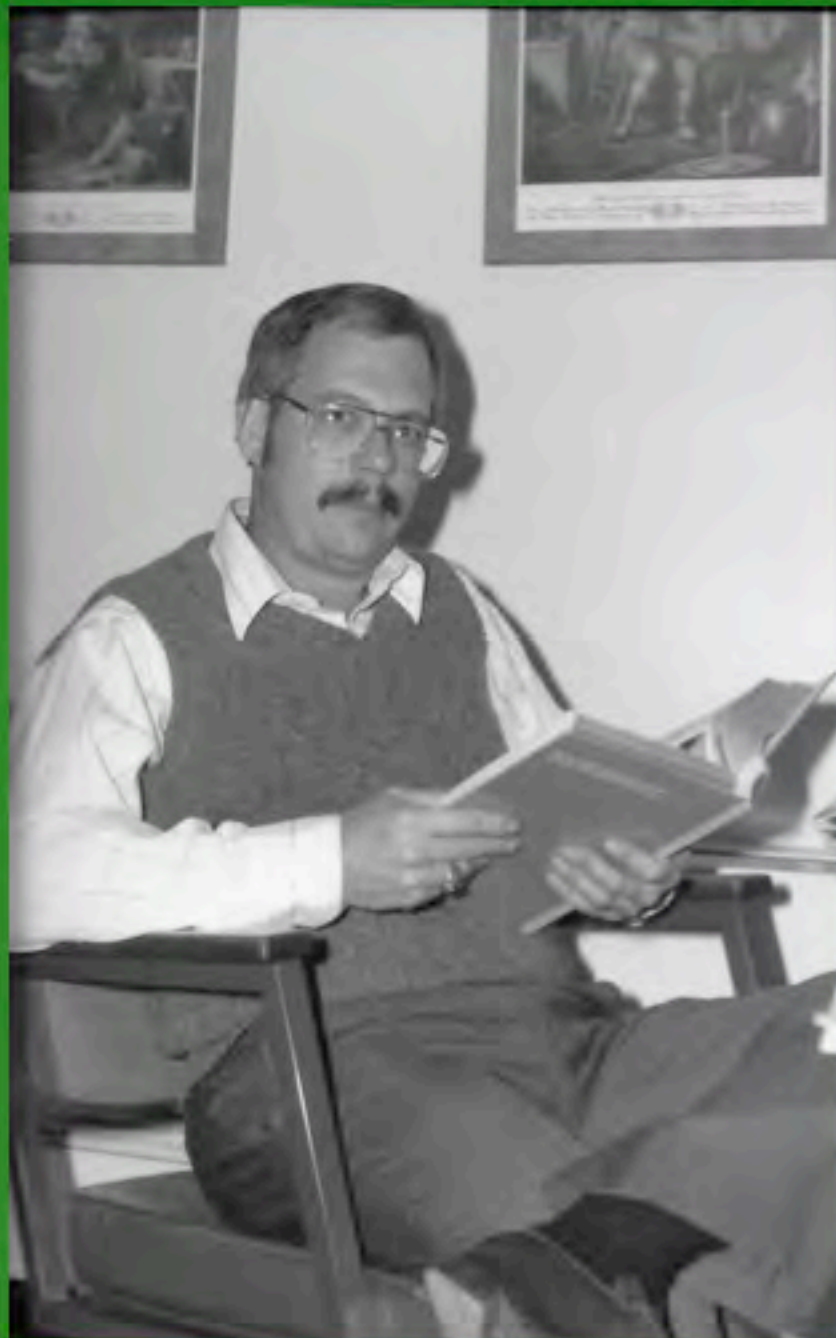
Department of Chemistry
of Chemistry and Biochemistry



1990s



1990s



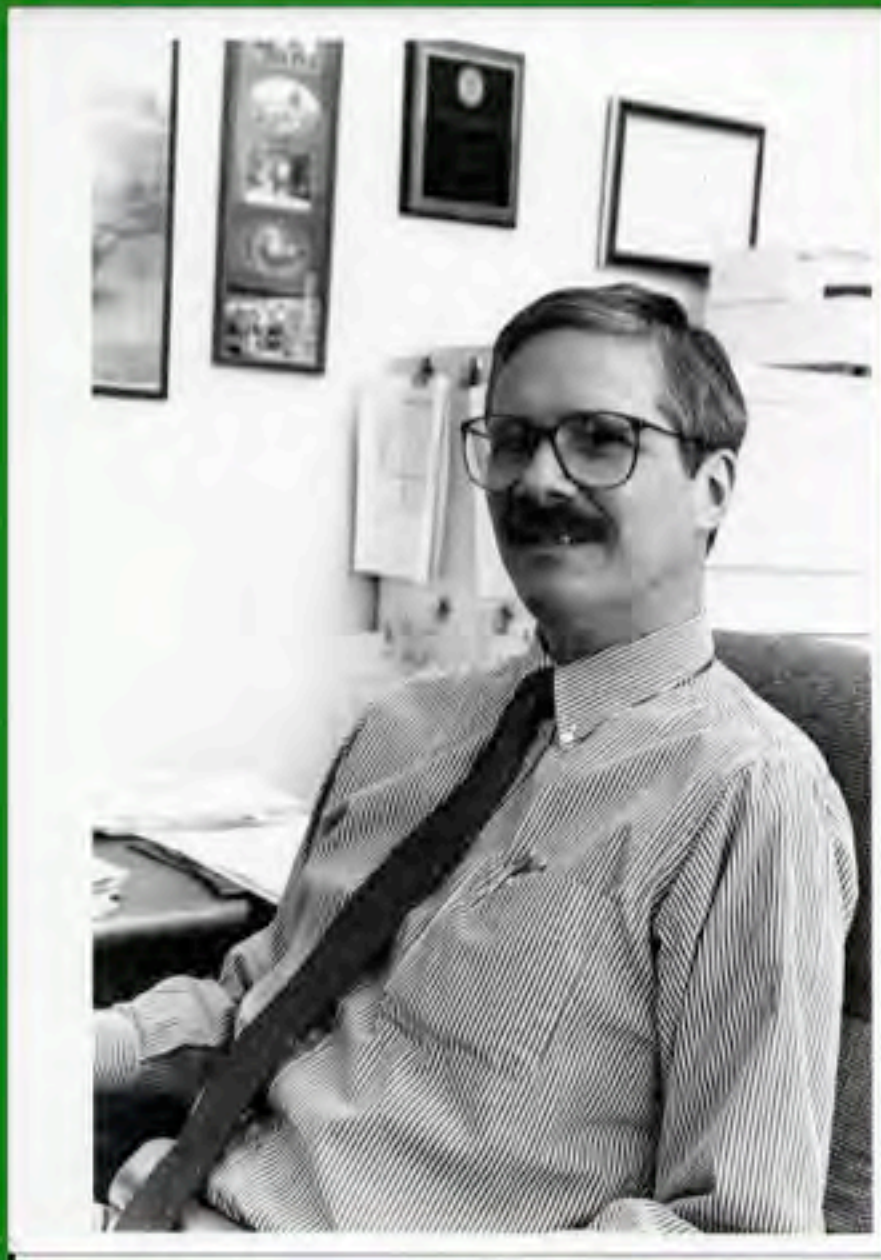
1980s
Dave Ridenour

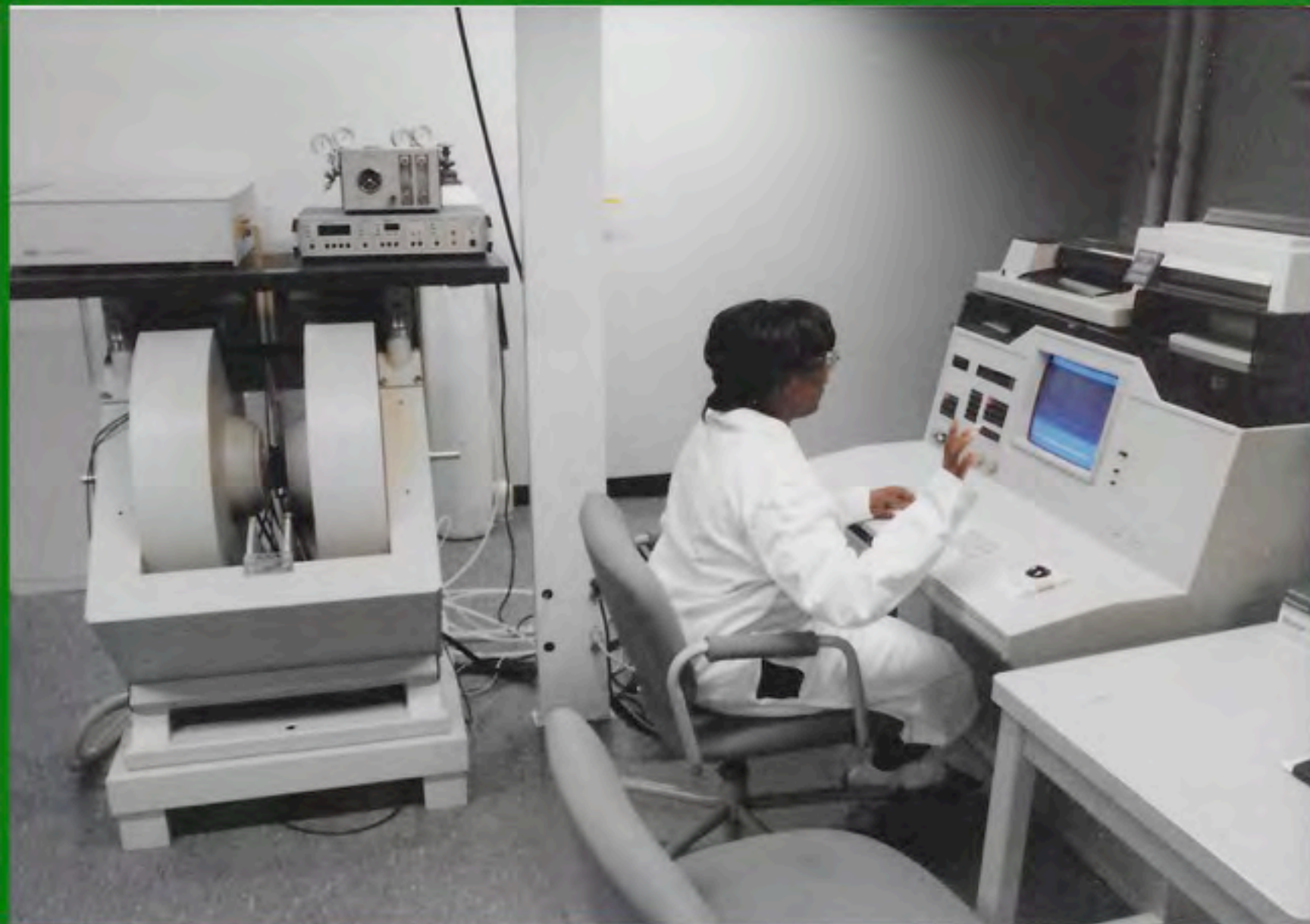


1985

Dr. Al Foster

1988 Dr. Jim Fry





1990s



1989

Dr. Eric Findsen



1990 Department of Chemistry
Faculty, Staff, Students



1990s Secretarial Staff: Pam, Anne,
Char, Jackie



1990s Department Picnic
Jon Kirchhoff "pied" by Joe Bitar.



1991 University Hall

1994 Chemistry Reading Room





1996

Chemistry Staff



1996 Chemistry Stockroom Staff



1996 Tony Martin, Ph.D.
Student (Pinkerton)



1995 Jon Kirchhoff
and Alex Hansen,
son of Char Hansen,
future chemist - to
be determined



2004 Char and Dr. Chrysochoos at his retirement party.



2004 Dr. Chrysochoos' retirement party



2005 Bowman-Oddy
Building



2015 Dr. Zhu's group



Department of Chemistry

Bowman-Oddy Laboratories, MS 602

The University of Toledo

2801 W. Bancroft St.

Toledo, OH 43606

419.530.2100 Phone

419.530.4033 Fax

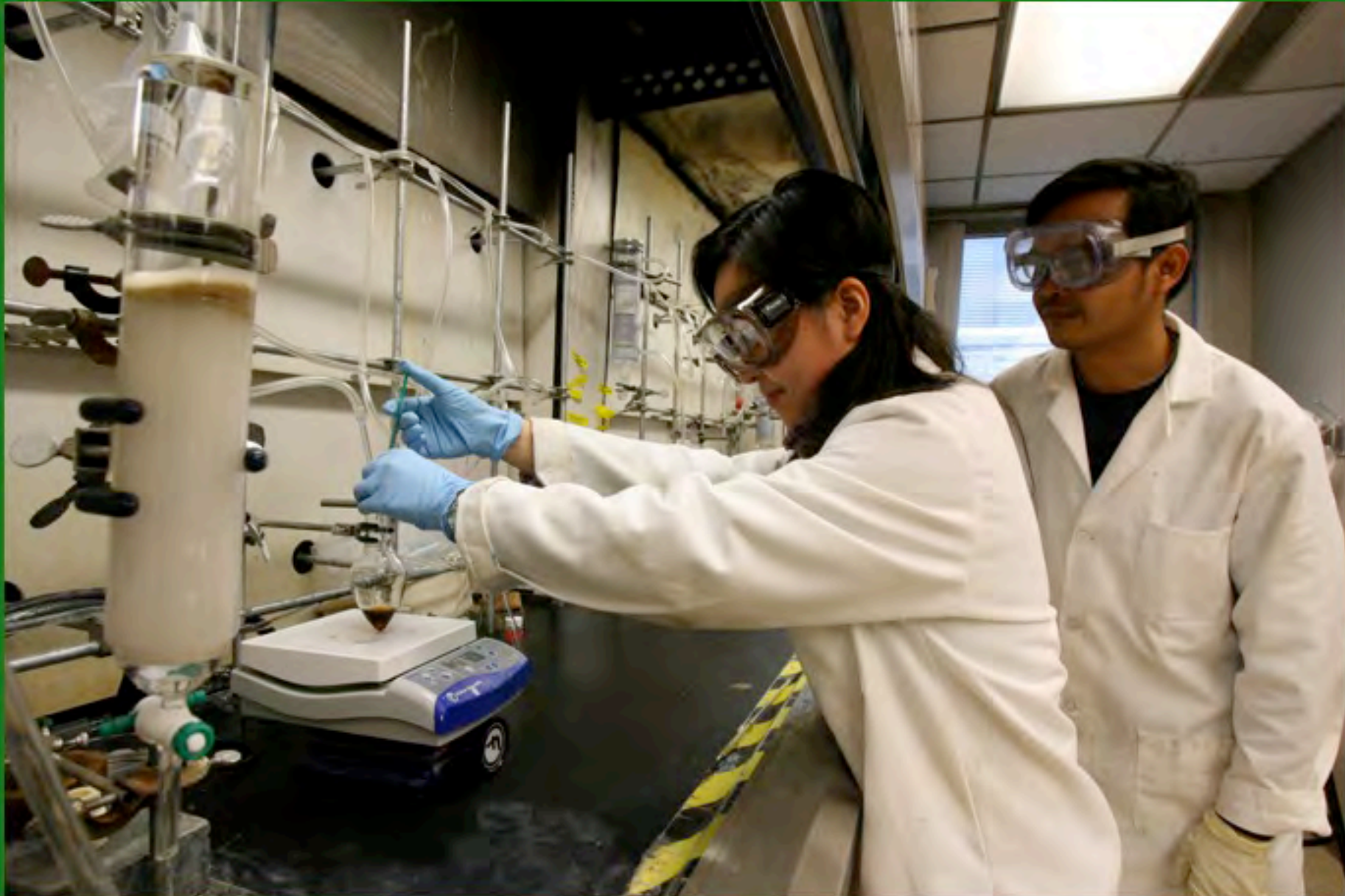
utchem@uoft02.utoledo.edu

www.chem.utoledo.edu

2005
Swish
logo

DEPARTMENT OF CHEMISTRY





2006



2006



1990 Bryan Wicks, Ph.D. student (Findsen)
and Dr. Jon Kirchhoff



2006 Jhindan Mukherjee, Ph.D.
Student (Kirchhoff)



2006



2006 Amy Gindhart, M.S. student
(Lind-Kovacs)

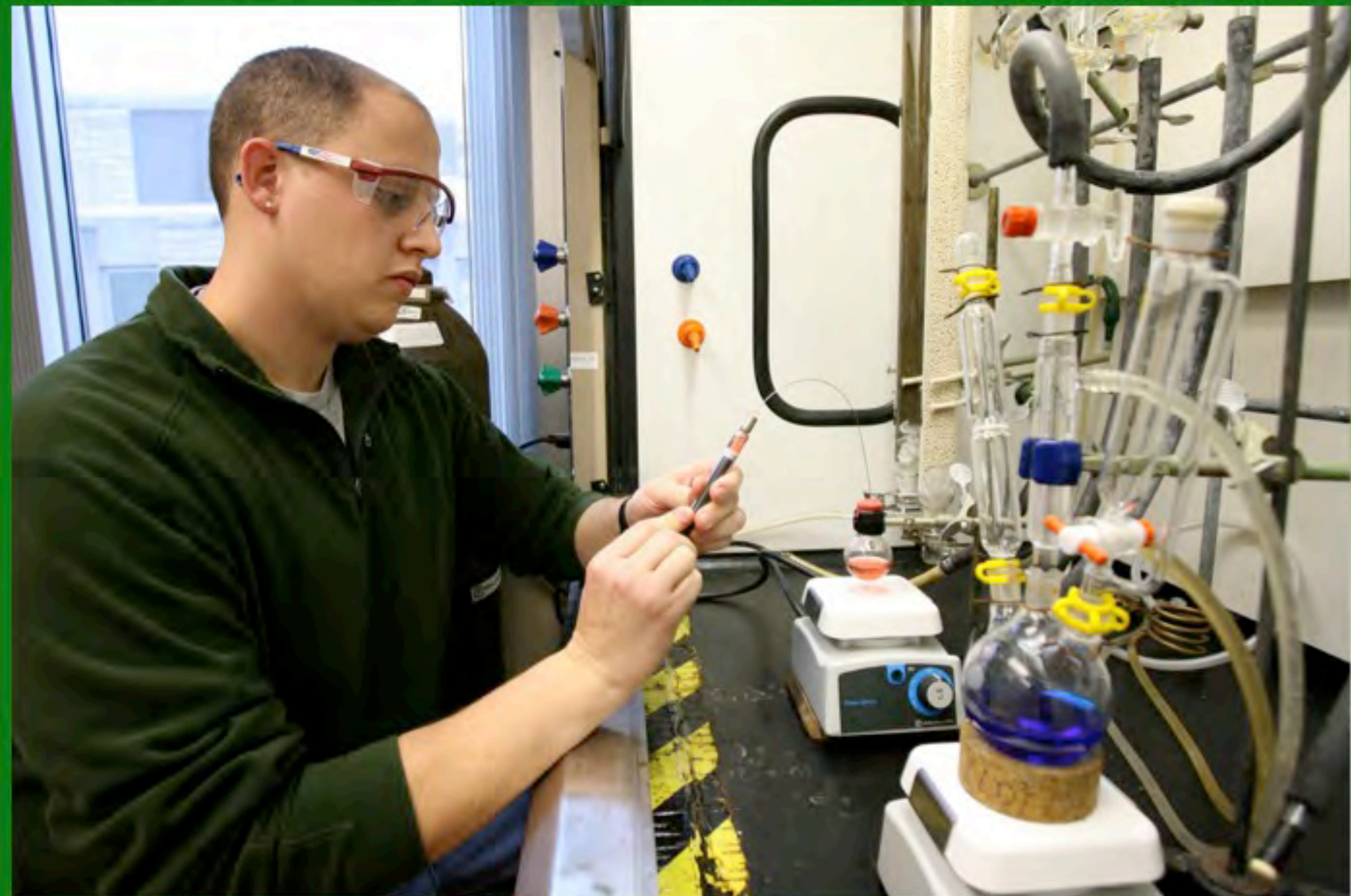


2006

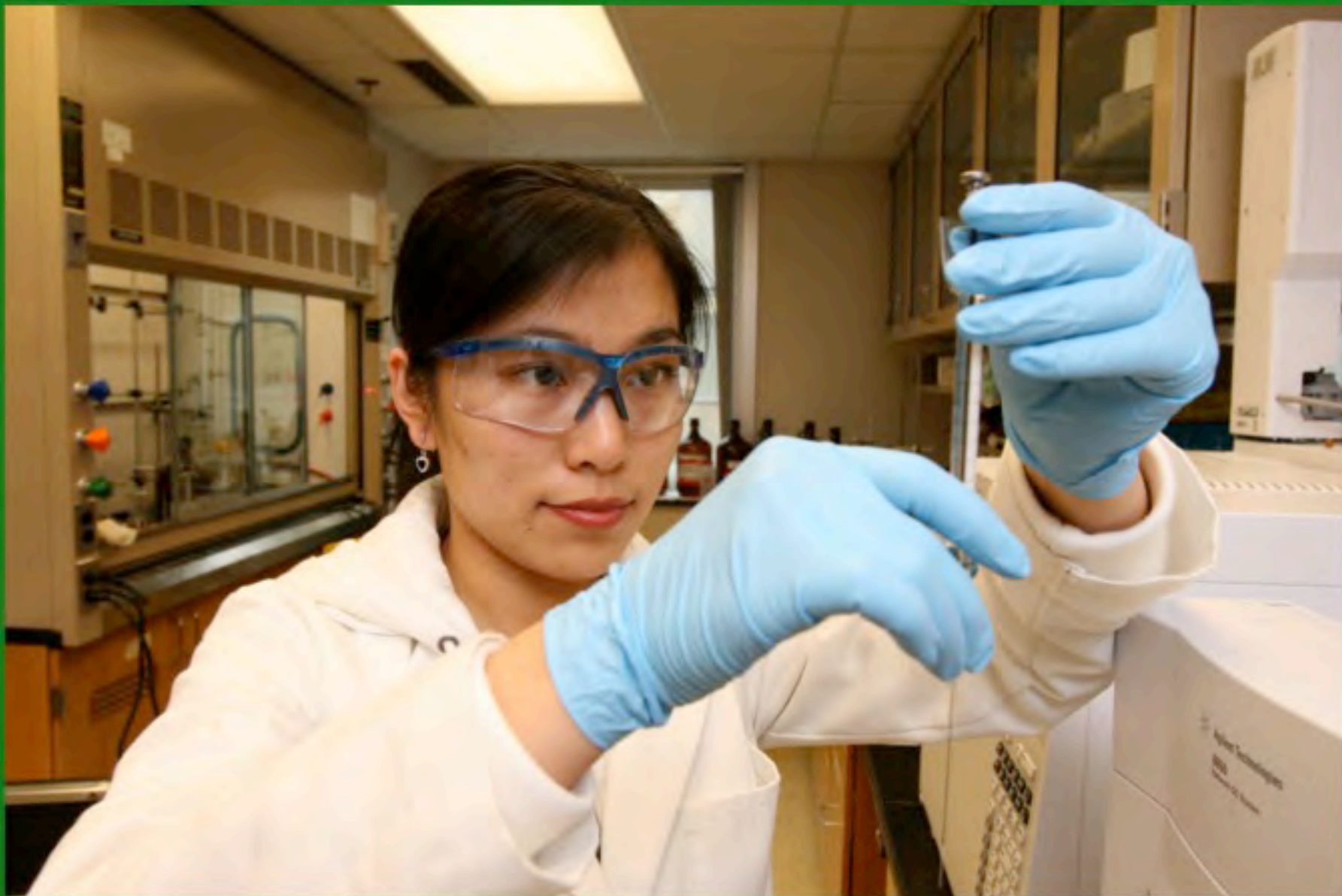
Vinu Johnson,
Ph.D. student
(Mueser)



2006



2006 Ryan Rondo, Ph.D. student
(Mason)



2006 Fei Zhao, M.S. student
(Anderson)



2006



2006



2006

Dr. Kristin
Kirschbaum,
Director of the
Instrumentation
Center



2006



2006 Nick Kingsley, Ph.D.
student (Mason)





2006 Virginie Cassaroto, Ph.D.
student (Hudson)



2006 Leah Kozy, M.S.
student (Lind-Kovacs)



2006



THE UNIVERSITY OF
TOLEDO
1872

Department of Chemistry

Bowman-Oddy Laboratories, MS 602

The University of Toledo

2801 W. Bancroft St.

Toledo, OH 43606

419.530.2100 Phone

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utchem@uoft02.utoledo.edu

www.utoledo.edu/as/chemistry

2008 University
Seal logo
replaces
"swish"

SEAL OF THE UNIVERSITY OF TOLEDO



The basic design has been used since 1931, when permission to use the coat of arms was granted by Don Jose Ballester, the mayor of Toledo, Spain. The seal recognizes the sister-city relationship between Toledo, Ohio, and Toledo, Spain.

The University's motto, inscribed in old Spanish at the base of the seal, reads: "Coadyuvando el Presente, Formando el Porvenir," which translates to "Guide to the Present, Moulder of the Future."

The seal bears a large blue eagle holding a shield divided into four segments.

The upper left portion is from the original Spanish coat of arms.

In 2006, the seal was changed to add three new shield quadrants to represent the University's mission of education and research and the merger with the Medical University of Ohio. The banner below the eagle includes four dates: 1872, the year the University was founded; 1884, the year it became a municipal institution; 1967, the year it joined Ohio's system of higher education; and 2006, the year it merged with the Medical University of Ohio.



Late 1990s When secretarial staff went from 4 to 2: Pam and Char



1982



2004 John Marburger visit



2004 John Marburger visit



2004 John Marburger visit,
talking with students at Libbey
Hall



1988

Dr. Fry
and
group



1988

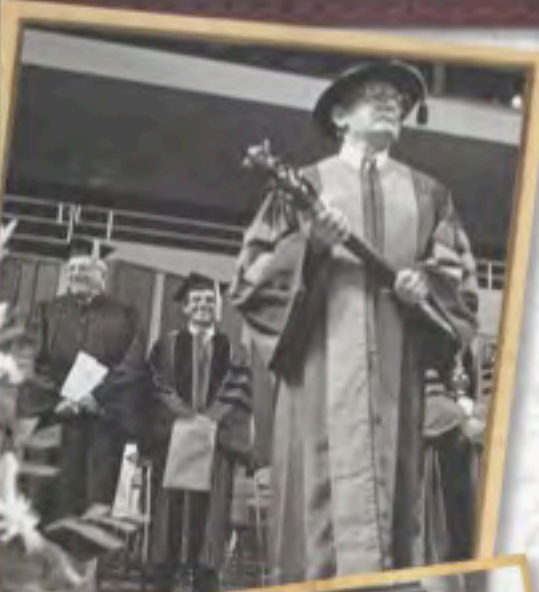
Dr. Andy
Jorgensen
and infamous
“jacket”.



2007
Prof Andy Jorgensen with
President Lloyd Jacobs



Art and Ginny Black



the initial gift to endow a fund to create a named professorship or chair titled the Arthur H. Black Professor or Chair of Chemistry. A minimum goal of \$1 million is necessary to establish this position. We hope you will join with us as we work toward our goal to recognize one of the outstanding former leaders at The University of Toledo and to continue his legacy for future generations of students.

A LIFELONG COMMITMENT TO THE UNIVERSITY OF TOLEDO



ARTHUR H. BLACK
PROFESSOR EMERITUS

Department of Chemistry
2801 W. Bancroft Street
Toledo, OH 43606-3390
419.530.2109
utchem@utoledo.edu
utoledo.edu/as/chemistry



THE UNIVERSITY OF
TOLEDO
1872

AS 2452 210

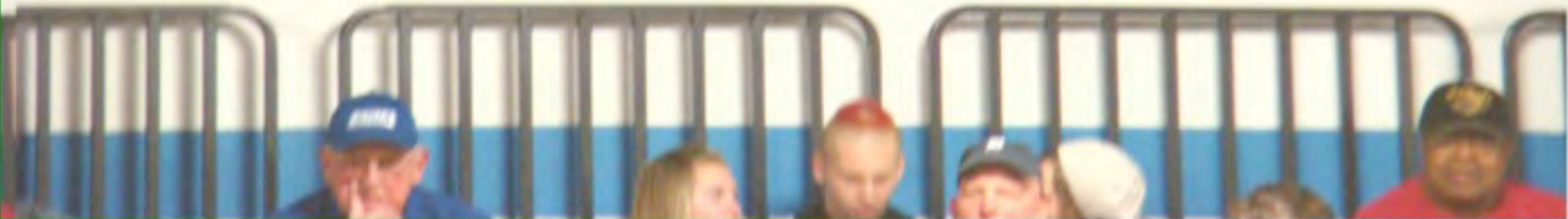
Department of Chemistry
and Associate Dean Emeritus
College of Arts and Sciences



THE UNIVERSITY OF
TOLEDO
1872

THE BEST TEAMS
HAVE CHEMISTRY

So
Z



2014 Anthony Wayne High School





LEADERS
OF THE
GLOBAL
SCIENTIFIC
COMMUNITY

PROGRAM FOR
ACADEMIC EXCELLENCE

DEPARTMENT OF CHEMISTRY

THE UNIVERSITY OF TOLEDO
DEPARTMENT OF CHEMISTRY

PRESENTS



DR. WILLIAM F. CARROLL JR.

VICE PRESIDENT, OCCIDENTAL
CHEMICAL CORPORATION
2005 PRESIDENT OF THE AMERICAN
CHEMICAL SOCIETY

"FROM GARBAGE TO STUFF:
HOW WE RECYCLE PLASTICS"

7:15 P.M.

DRISCOLL CENTER AUDITORIUM
JANUARY 13, 2005
DRISCOLL ALUMNI CENTER

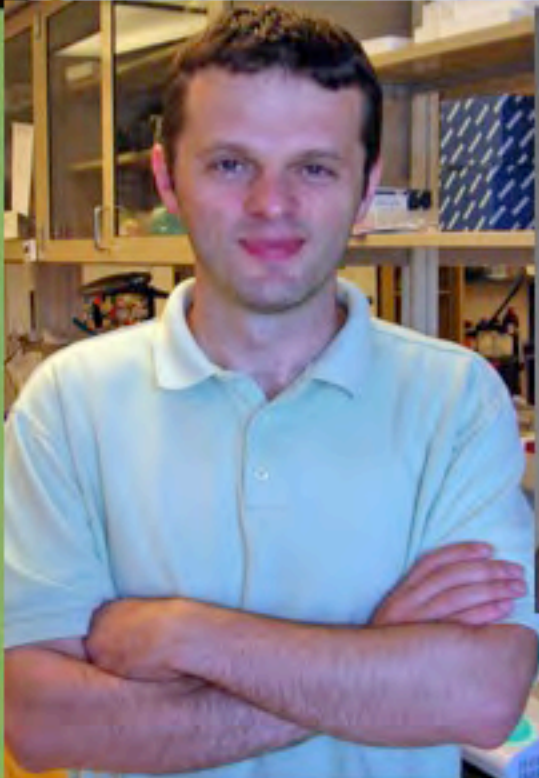
2005 Program for
Academic Excellence





2015 Dr. William Carroll Colloquium

2015
Faculty



DEPARTMENT OF CHEMISTRY



DEPARTMENT OF CHEMISTRY



CHEMISTRY, SOMETHING FOR EVERYONE

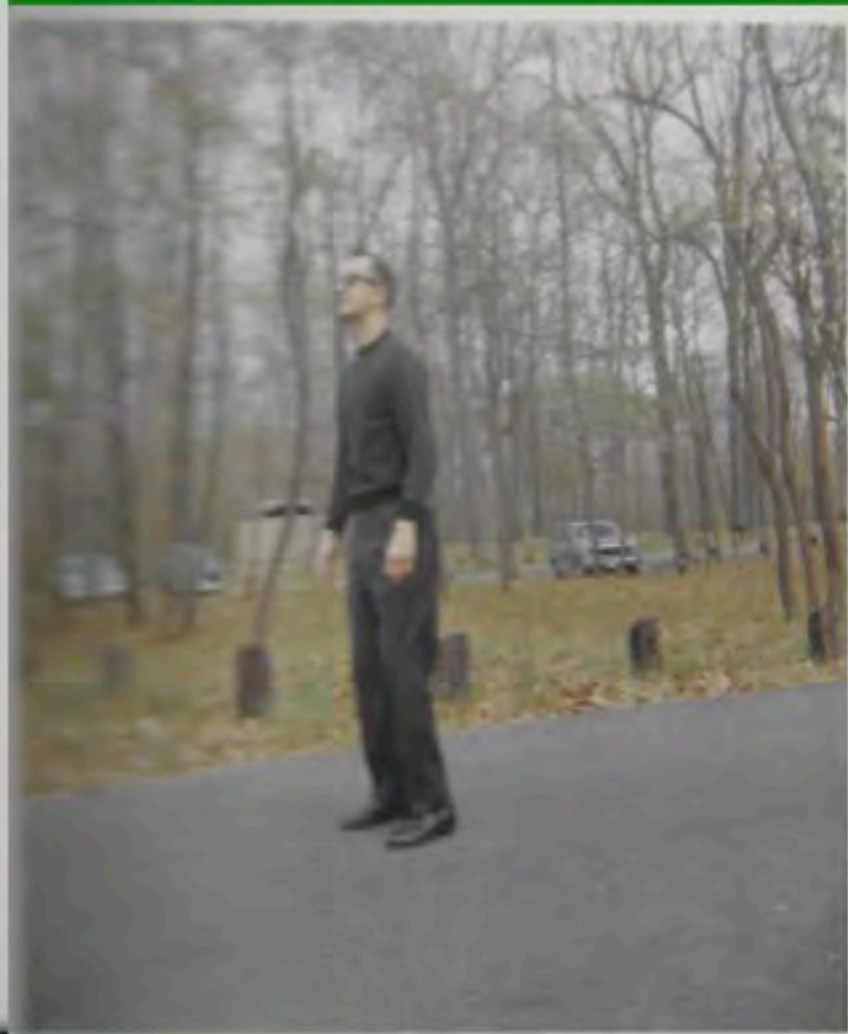
CHEMISTRY HELP
CENTER

"The Place for
Chemical
Solutions"



2007

Graduate Open
House



1968 Department Picnic Prof Bob Niedzielski



2007 Dr. Bob Niedzielski



Carlson Library
Construction 1971



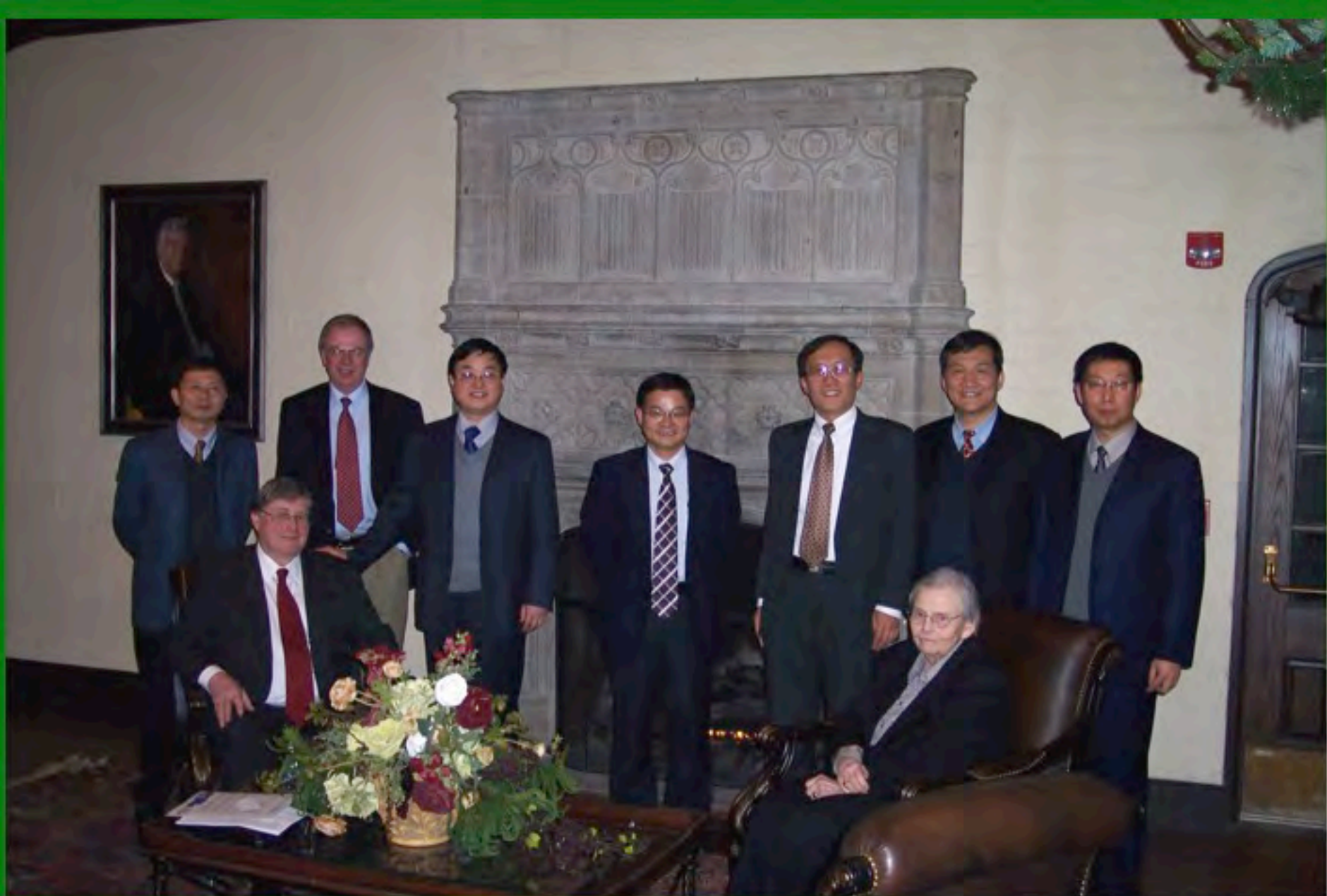
2008 Char getting UT Students First Award with Dr. Heritage, President Jacobs, Alan and Nina



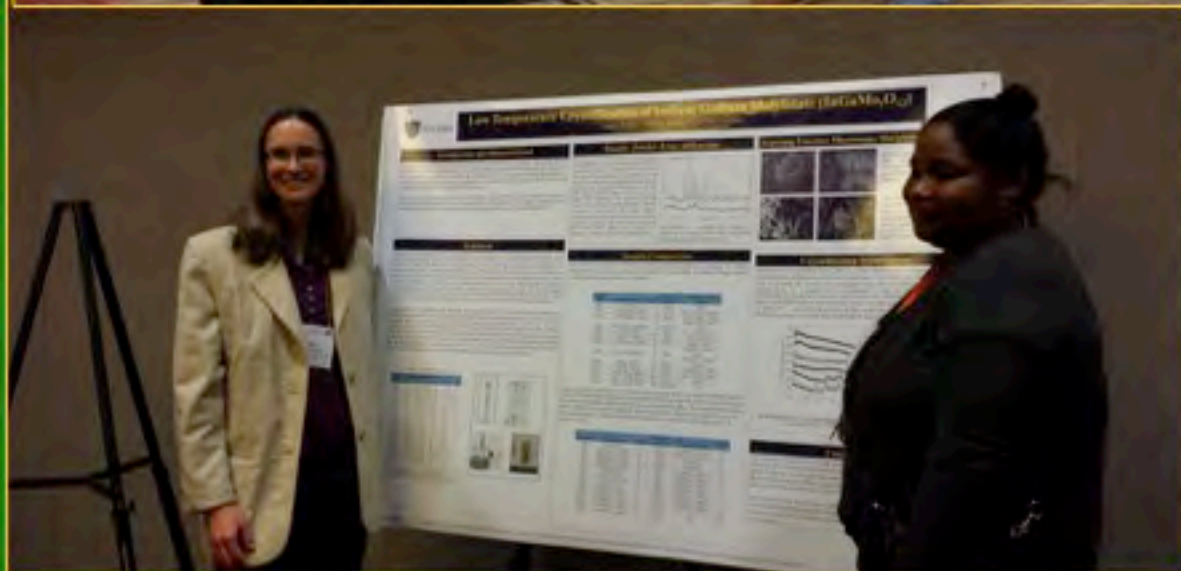
Departmental Picture early 1990s



1926 Prof Nelson Hovey



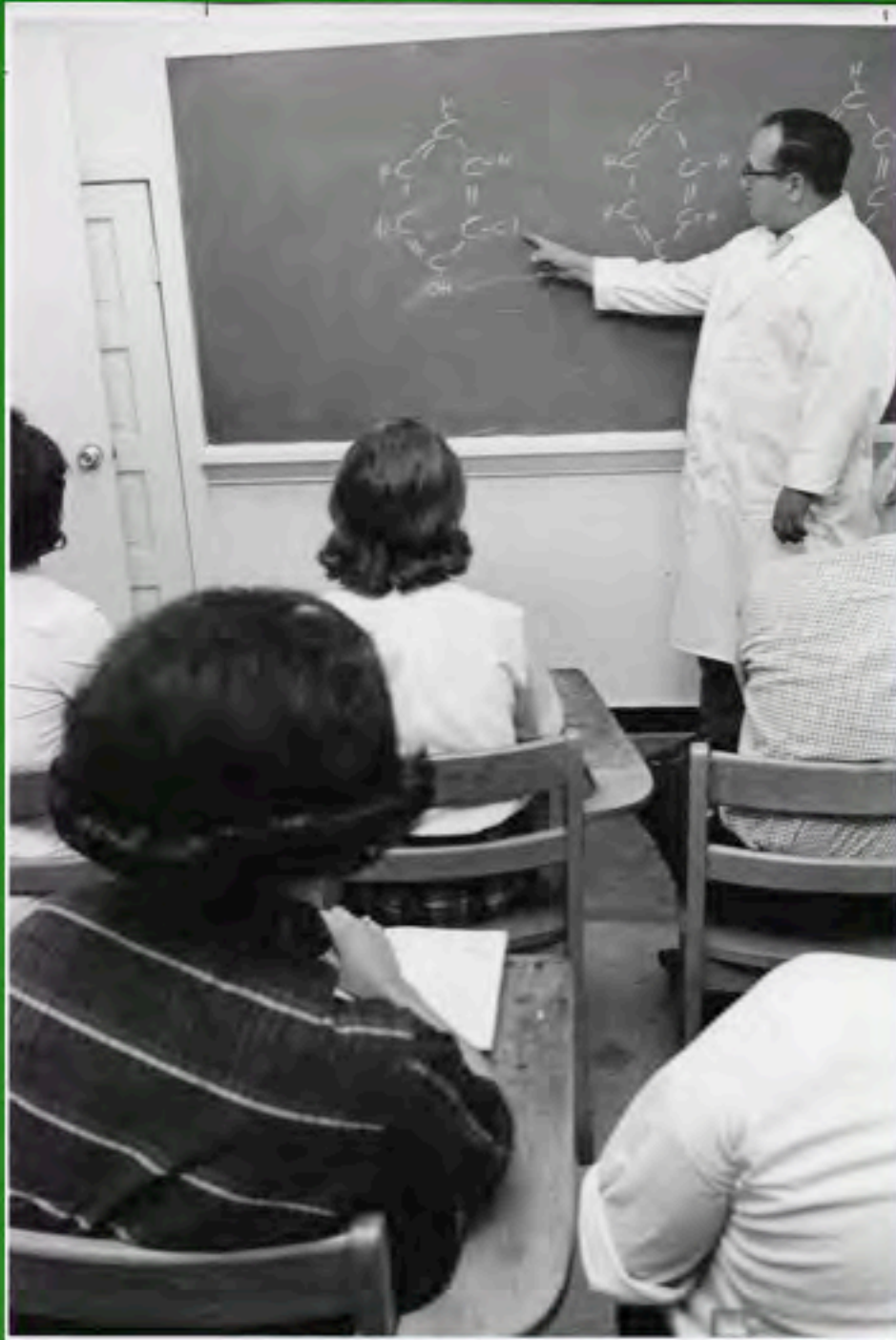
2008 Chinese Chemistry Delegation



2014 ACS CERM in Pittsburgh



2014

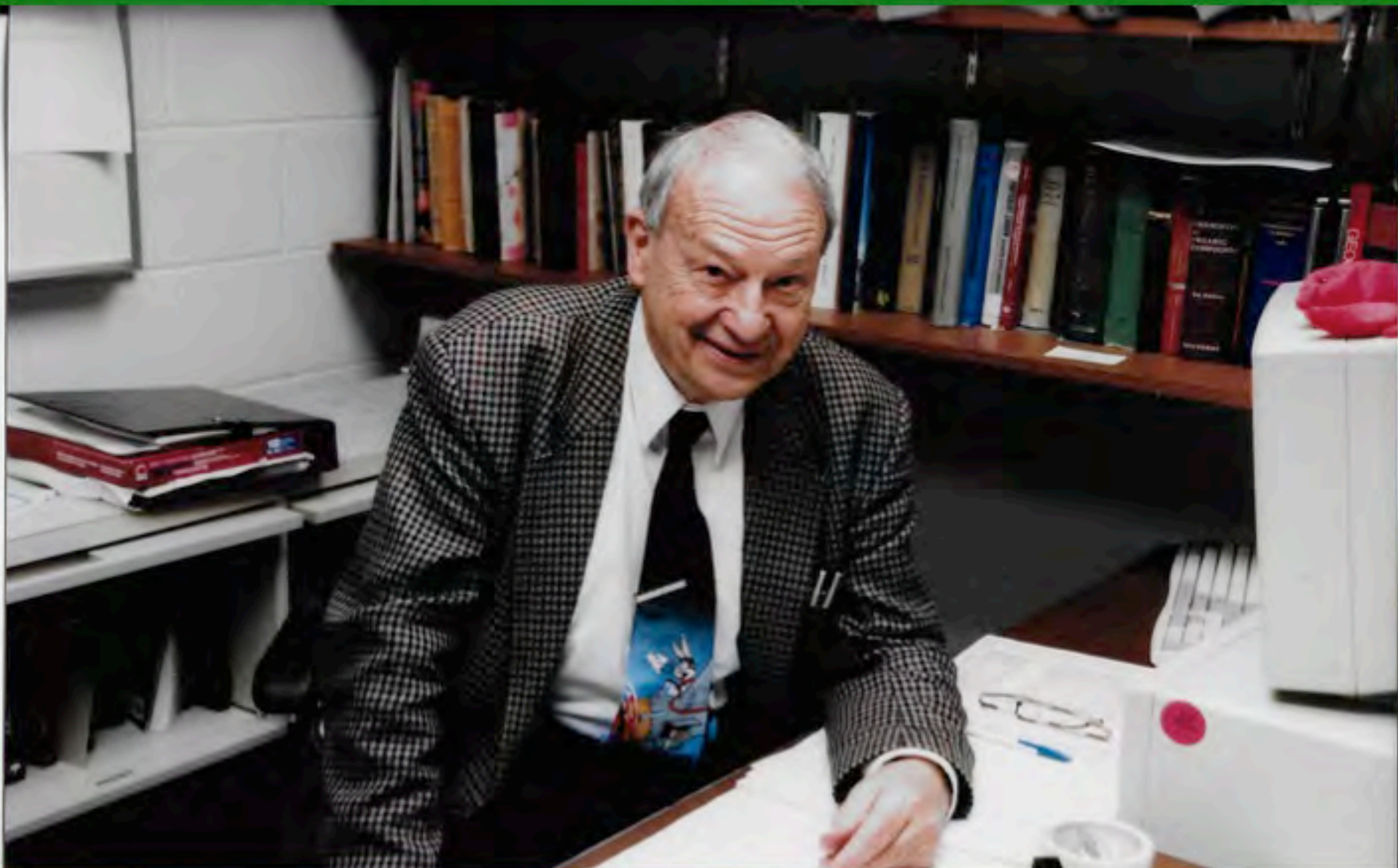


1960s

IUPAC Periodic Table of the Elements

1											13						18															
1 H Hydrogen (1.007 94)	2												5 B Boron (10.811)	6 C Carbon (12.011)	7 N Nitrogen (14.007)	8 O Oxygen (15.999)	9 F Fluorine (18.998)	10 Ne Neon (20.180)														
3 Li Lithium (6.941)	4 Be Beryllium (9.012)											11 Al Aluminum (26.982)	12 Si Silicon (28.086)	13 P Phosphorus (30.974)	14 S Sulfur (32.06)	15 Cl Chlorine (35.45)	16 Ar Argon (39.948)															
11 Na Sodium (22.990)	12 Mg Magnesium (24.305)											19 K Potassium (39.098)	20 Ca Calcium (40.078)	21 Sc Scandium (44.956)	22 Ti Titanium (47.88)	23 V Vanadium (50.942)	24 Cr Chromium (52.004)	25 Mn Manganese (54.938)	26 Fe Iron (55.845)	27 Co Cobalt (58.933)	28 Ni Nickel (58.693)	29 Cu Copper (63.546)	30 Zn Zinc (65.38)	31 Ga Gallium (69.723)	32 Ge Germanium (72.63)	33 As Arsenic (74.922)	34 Se Selenium (78.96)	35 Br Bromine (79.904)	36 Kr Krypton (83.80)			
37 Rb Rubidium (85.468)	38 Sr Strontium (87.62)	39 Y Yttrium (88.906)	40 Zr Zirconium (91.224)	41 Nb Niobium (92.906)	42 Mo Molybdenum (95.94)	43 Tc Technetium (98)	44 Ru Ruthenium (101.07)	45 Rh Rhodium (102.91)	46 Pd Palladium (106.37)	47 Ag Silver (107.87)	48 Cd Cadmium (112.41)	49 In Indium (114.82)	50 Sn Tin (118.71)	51 Sb Antimony (121.76)	52 Te Tellurium (127.6)	53 I Iodine (126.91)	54 Xe Xenon (131.29)															
55 Cs Cesium (132.91)	56 Ba Barium (137.33)	57-71 Lanthanoids	72 Hf Hafnium (178.49)	73 Ta Tantalum (180.95)	74 W Tungsten (183.84)	75 Re Rhenium (186.21)	76 Os Osmium (190.23)	77 Ir Iridium (192.22)	78 Pt Platinum (195.08)	79 Au Gold (196.97)	80 Hg Mercury (200.59)	81 Tl Thallium (204.38)	82 Pb Lead (207.2)	83 Bi Bismuth (208.98)	84 Po Polonium (209)	85 At Astatine (210)	86 Rn Radon (222)															
87 Fr Francium (223)	88 Ra Radium (226)	89-103 Actinoids	104 Rf Rutherfordium (261)	105 Db Dubnium (262)	106 Sg Seaborgium (263)	107 Bh Bohrium (264)	108 Hs Hassium (265)	109 Mt Meitnerium (266)	110 Ds Darmstadtium (267)	111 Rg Roentgenium (268)	112 Cn Copernicium (269)			114 Fl Flerovium (289)	115 115	116 Lv Livermorium (293)																
																		57 La Lanthanum (138.91)	58 Ce Cerium (140.12)	59 Pr Praseodymium (140.91)	60 Nd Neodymium (144.24)	61 Pm Promethium (145)	62 Sm Samarium (150.36)	63 Eu Europium (151.96)	64 Gd Gadolinium (157.25)	65 Tb Terbium (158.93)	66 Dy Dysprosium (162.50)	67 Ho Holmium (164.93)	68 Er Erbium (167.26)	69 Tm Thulium (168.93)	70 Yb Ytterbium (173.05)	71 Lu Lutetium (174.97)
																		89 Ac Actinium (227)	90 Th Thorium (232.04)	91 Pa Protactinium (231.04)	92 U Uranium (238.03)	93 Np Neptunium (237)	94 Pu Plutonium (244)	95 Am Americium (243)	96 Cm Curium (247)	97 Bk Berkelium (247)	98 Cf Californium (251)	99 Es Einsteinium (252)	100 Fm Fermium (257)	101 Md Mendelevium (258)	102 No Nobelium (259)	103 Lr Lawrencium (260)

2013



1990 Prof David Dollimore



1998

David Dollimore
70th Birthday



1998 David Dollimore
70th Birthday



1990 Dean Giolando and Treavor Evans,
P.D. student (Dollimore)

2005
Dean Giolando



2005 Chair
Alan Pinkerton





LEADERS
OF THE
GLOBAL
SCIENTIFIC
COMMUNITY

PROGRAM FOR
ACADEMIC EXCELLENCE

DEPARTMENT OF CHEMISTRY

THE UNIVERSITY OF TOLEDO
AND THE DEPARTMENT OF CHEMISTRY
PRESENTS



DR. ARDEN L. BEMENT JR.
DIRECTOR, NATIONAL SCIENCE FOUNDATION

"ENERGY, ENVIRONMENT AND
ECONOMY: CAN SCIENCE HELP?"

7 P.M.
NOVEMBER 3, 2008
MEMORIAL FIELD HOUSE
ROOM 2100

*Refreshments will be served in the Town Hall area
immediately following the presentation.*



1967

Dr. Brady (L)

Dr Kay (R)



1970s

Dr. Lance Thompson

First Kreider Scholarship Recipients



Seated, the late Dr. Kreider and standing from left to right, Richard Pacer, William Savage and Gerald Penn. (See story below.)

Memorial Scholarships of Dr. Henry Kreider Being Administered By Alumni Foundation

The three children of the late Dr. and Mrs. Henry R. Kreider, all of them TU alumni, and the Chemistry Department Committee have completed their plans for the "Henry R. Kreider Scholarships in Chemistry." And its administration has been turned over to the Alumni Foundation.

The children of the beloved former TU professor are, Mrs. Josephine Ziegler '28, Lewisburg, Pa.; Dr. Henry R. Kreider, Jr. '33, Detroit, Michigan and Mrs. Ruth Hiltner '37, Williams Bay, Wis. They have been creating a fund for the scholarships since Dr. Kreider's death in 1961 and, with contributions from friends and alumni who studied with Dr. Kreider eventually the income will allow several scholarships in chemistry annually.

Nominations and recommendations for the Kreider Memorial Scholarships will be made by a committee headed by Dr. Nelson W. Hovey and including Dr. Harold G. Oddy, Dr. Albertine Krohn, Dr. Richard L. Titus and Prof. Arthur H. Blark. They will work in cooperation with the Alumni Foundation.

Gifts to the fund are totally tax deductible if specified for the "Henry R. Kreider Scholarship Fund" and sent to the Alumni Office. Make checks payable to the University of Toledo Alumni Foundation, Inc.

Dr. Kreider, as his students between 1915 and 1944 will remember, was a most unusual educator. He was an ordained minister and returned to his congregations following retirement. Much of his original chemical research is found in the professional abstracts and publications. As Chairman of the Department of Chemistry, Dr. Kreider is credited with creating the outstanding department of today.

1st KREIDER RECIPIENTS

The first Kreider Scholarship recipients have continued their education. Richard Pacer has been awarded his PhD at the University of Michigan, William Savage received his MS degree at the University of Toledo, and Gerald Penn, MD at Ohio State University.

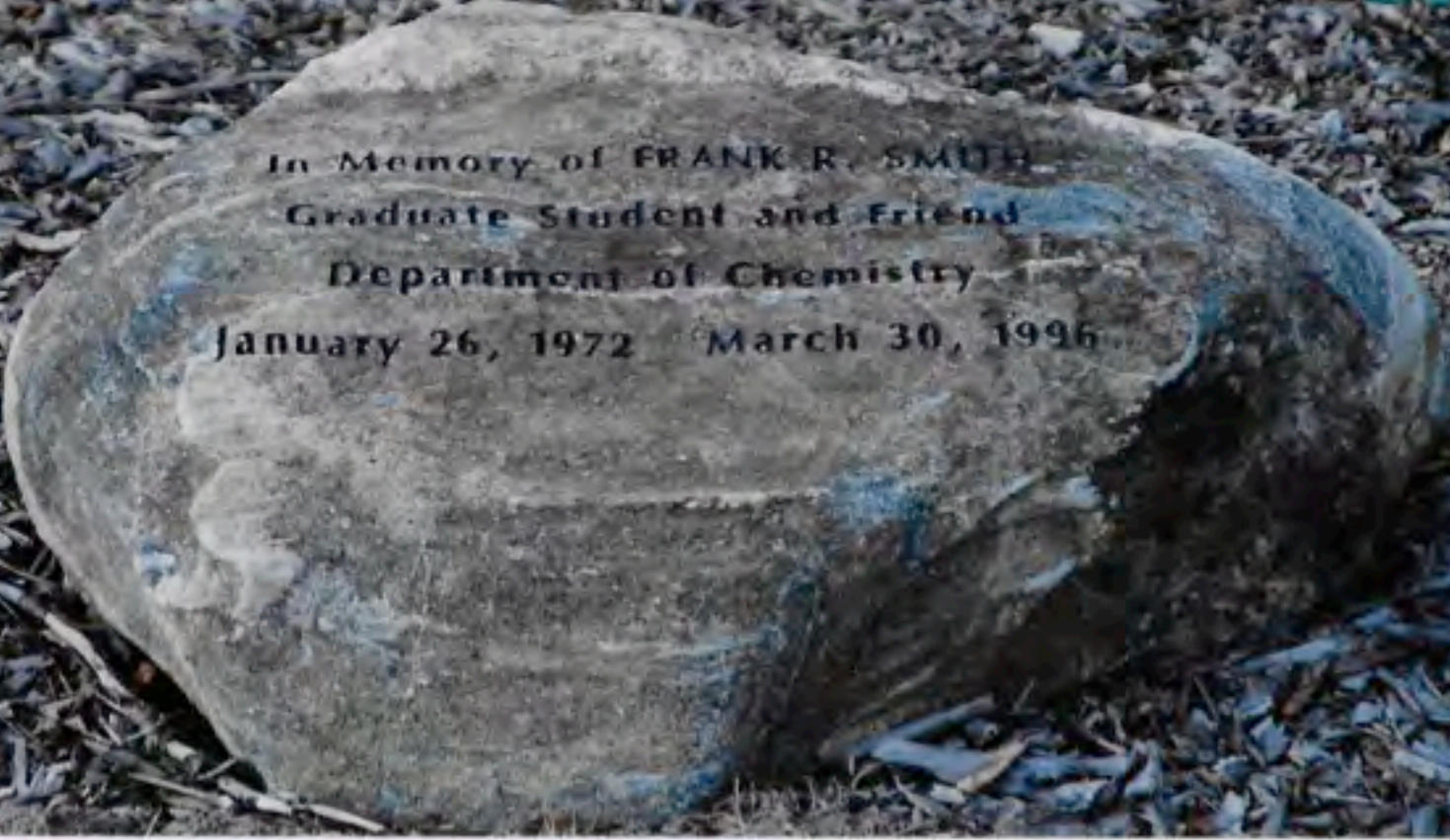
TC Nears Goal . . .

(Continued from Page 1)

Dr. and Mrs. William S. Carlson, President of University are giving the Tower Club members and their wives a dinner on November 30, 1965 in the Student Union.

In October members of the Tower Club, including their wives, were guests of the University of Toledo for the presentation of "Little Mary Sunshine", a University Theatre production in Doermann Theatre.

1965



In Memory of FRANK R. SMITH
Graduate Student and Friend
Department of Chemistry
January 26, 1972 March 30, 1996

Frank Smith Memorial Rock



1950-1960s
Duane Burrow



Chemists put it all
on the table





1980s



Gen Chem Lab 1996



1950s Women in Science

29.0



1950 - 1960s Jack Wise, Glassblower



1970s



1990 Amy
Smith,
Ph.D.
student
(Kirchhoff)



1990 Pannee Burckel, Ph.D.
student (Edwards)

*The
Henry R. Kreider
Scholarships
in Chemistry*



*Department of Chemistry
The University of Toledo
Toledo, Ohio*

1965 brochure



2010 Glassblower, Steve Moder and icicle making





Lab 1920s

Ginny Black, First Lady of Chemistry, with Max Funk and Pam Samples at Honors Day.

Nina McClelland and Ginny Black at Ginny's 95th birthday this past summer.

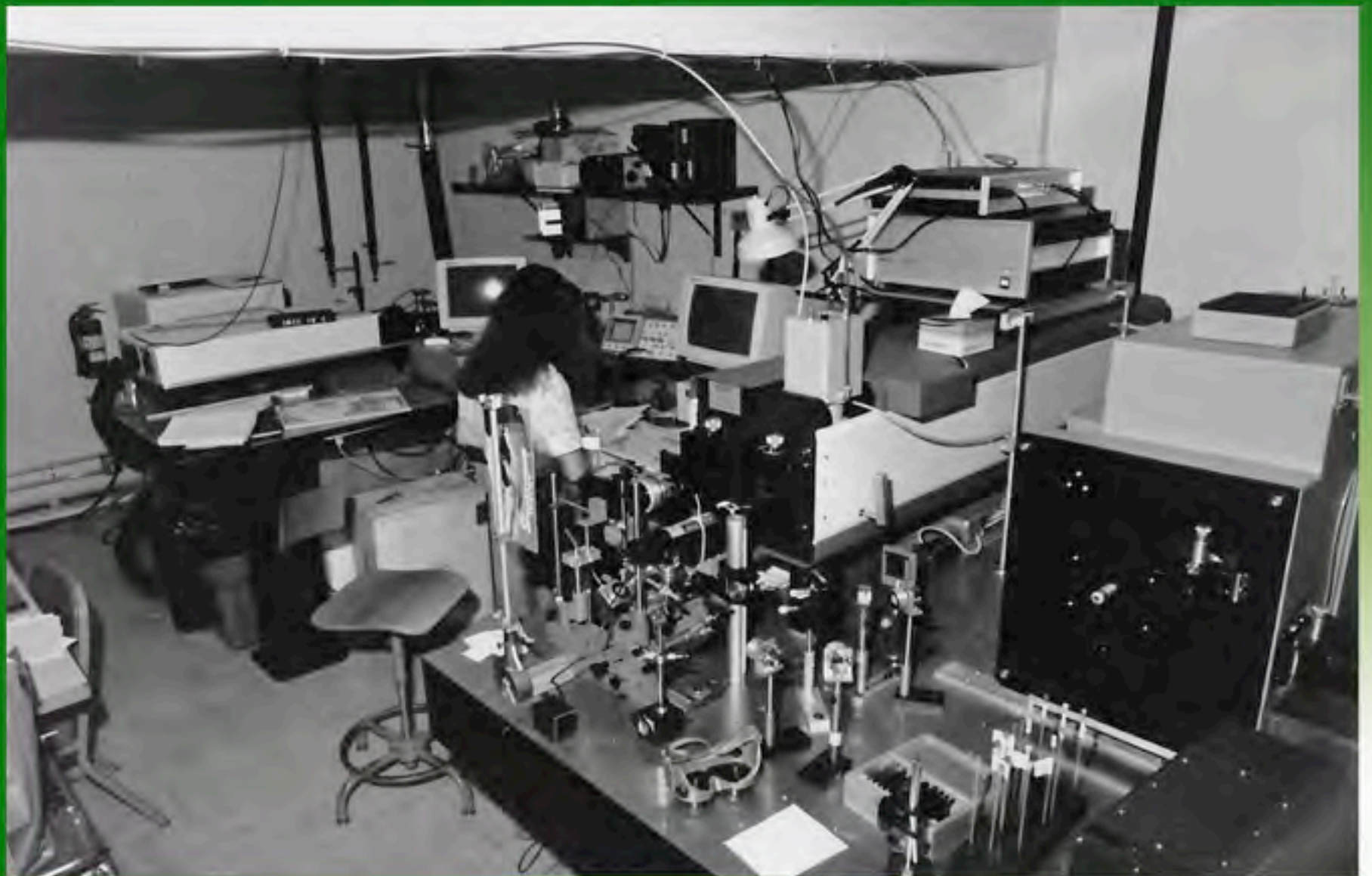




Lab 1970s
Oh No!
No Goggles

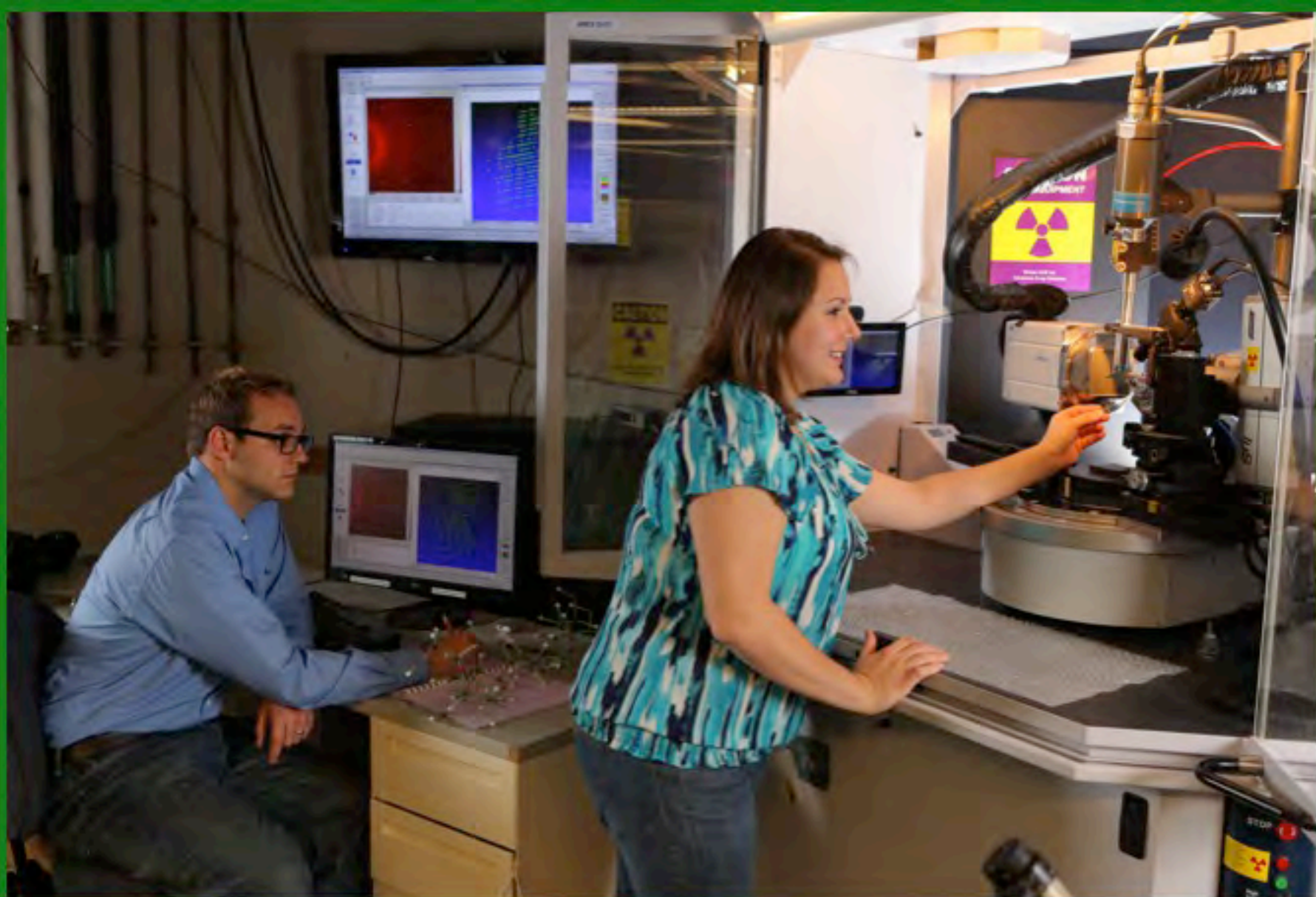


2007 in the lab
with goggles!





Then.....

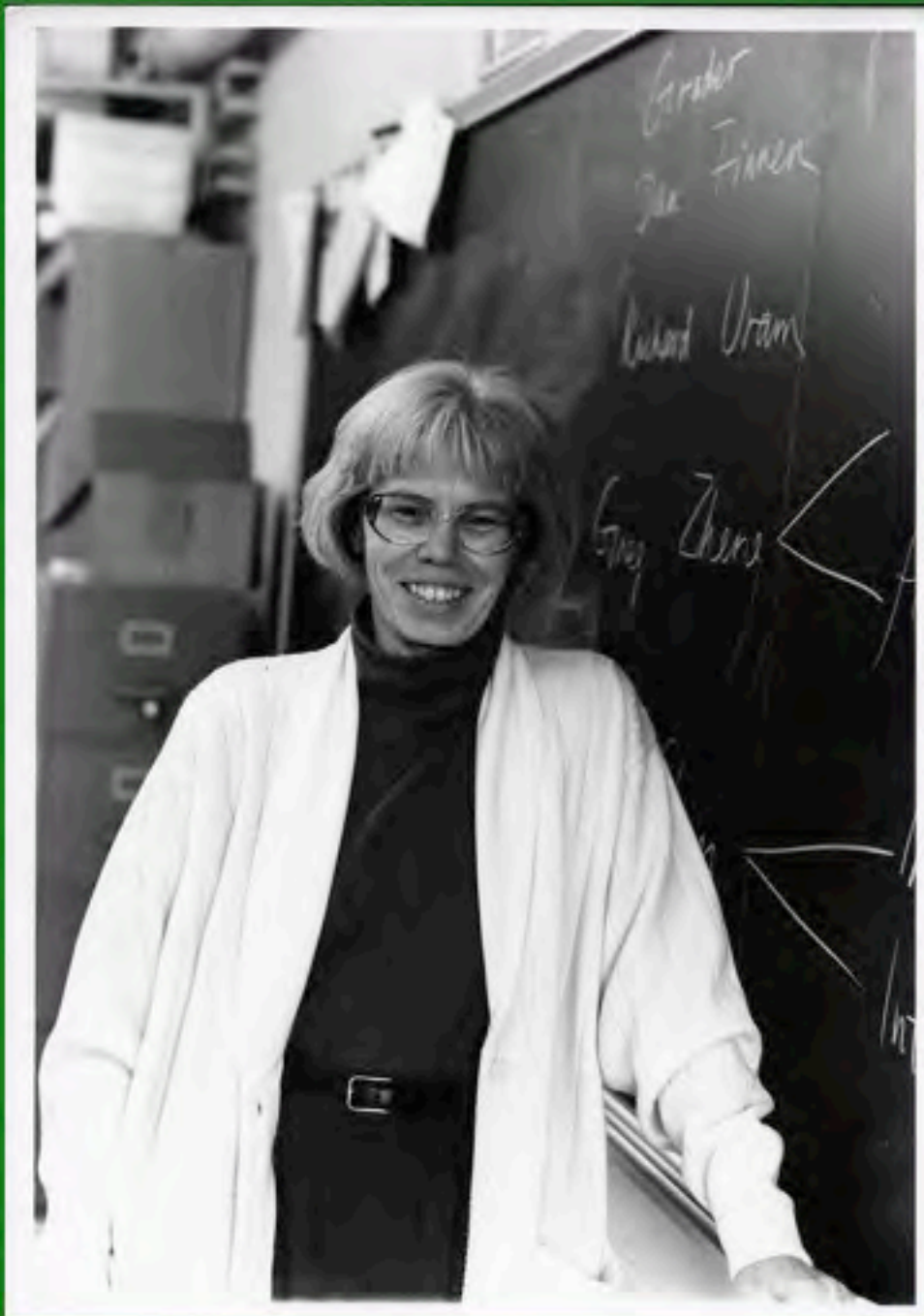


.....Now



2014 Dr. Andreana Group

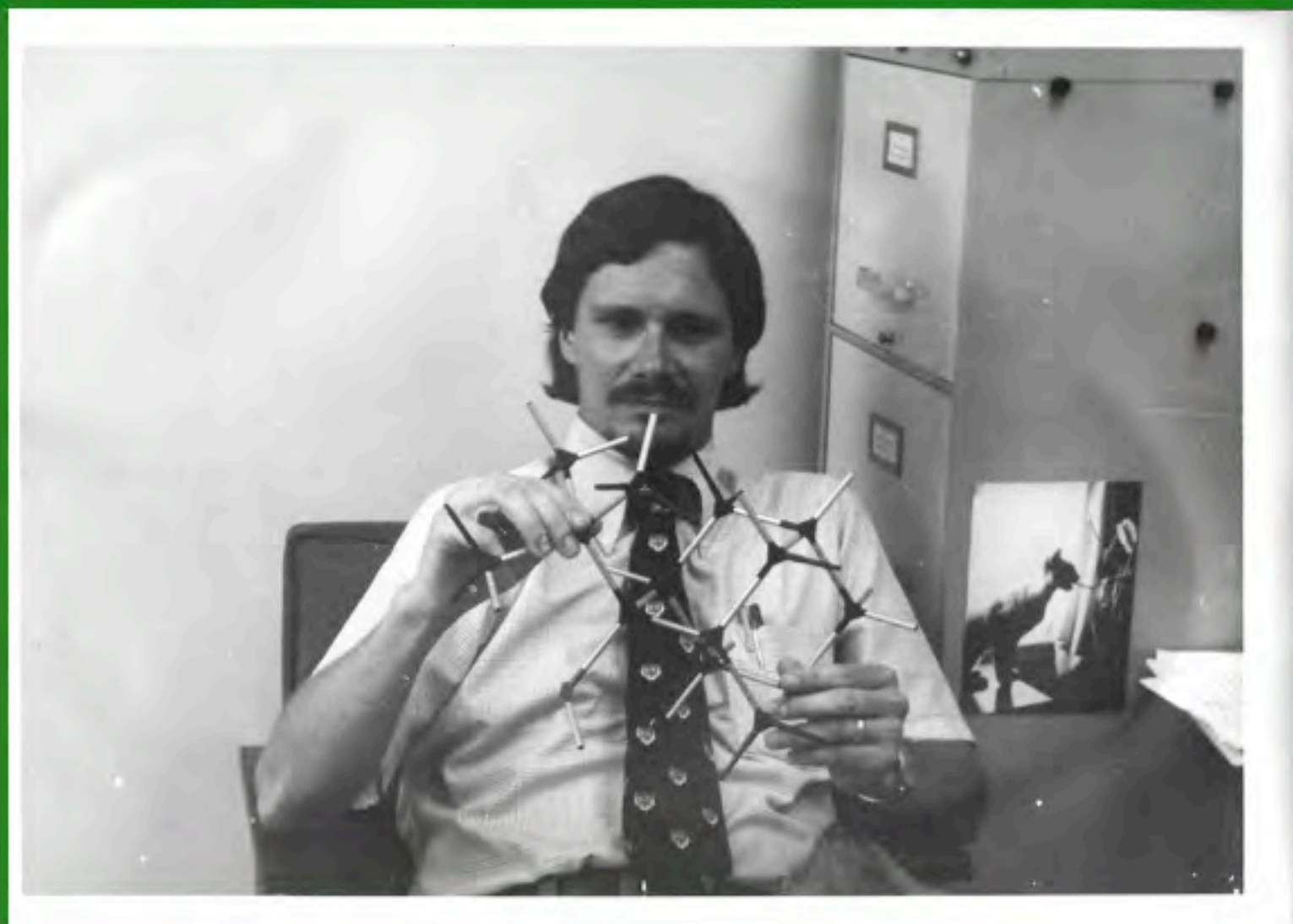
2015 <http://www.andreanagroup.com/>



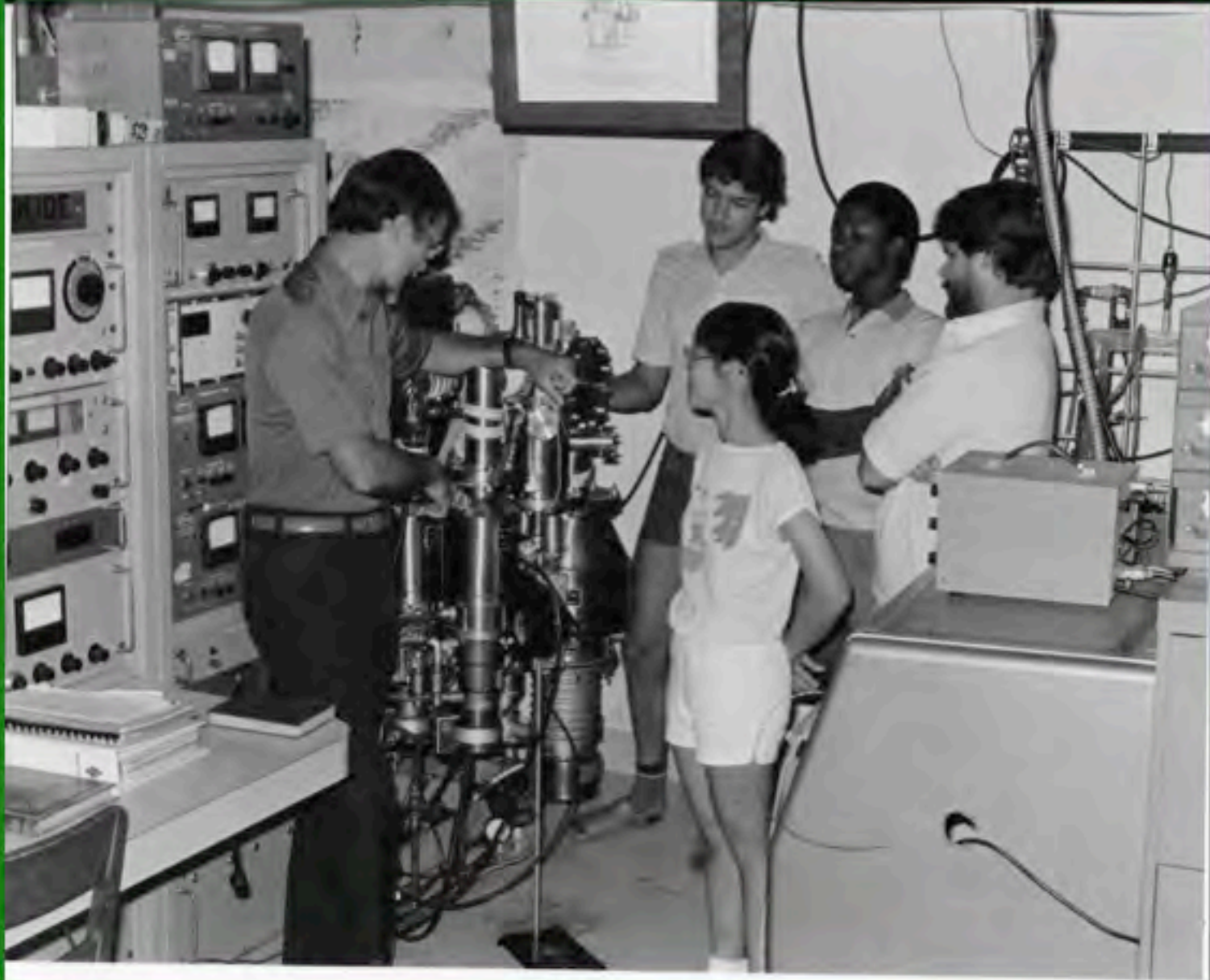
Jean Jacob 1990s



2004
Kent Dauterman
Outstanding
Alumni



Dr Jim Fry 1980s



1980s Dr. Edwards Group



Dr. John Chrysochoos,
1996 Chair



1996 Secretarial Staff: Pam, Char, Jackie Zydorczyk

Gift given to chemistry

BY K' STAFF

The UT chemistry department got what it needed: money.

Thanks to Willard Bright, a UT graduate from 1936, the department has \$1 million to spend on an endowed professor or chairman, according to Andrew Jorgensen, an associate professor of chemistry.

This is a big step for the university and the chemistry department; the department does not currently have any endowed chairs, Jorgensen said.

"Serious departments have endowed chairs," he added.

"The best universities and departments in the country have significant numbers of endowed professors," said Jon Kirchhoff, associate chairman of the chemistry department.

The endowment is worth more than providing scholarships or buying new equipment because there are already scholarships in place and equipment is regularly replaced through federal grants, Jorgensen said.

"It's a balance between scholarships, space, professors and students that makes a good department," he said.

Even if UT wanted to use this endowment for scholarships, the reality is that the UT must use the endowment to hire a professor.

According to Jorgensen, Bright wanted to help increase the reputation of the university, so the endowment is set up in his estate and, because of that, the university does not have the \$1 million yet.

"The beauty of this endowment is that the donor wanted the university to go out and hire an expert in the field," Jorgensen said.

Normally when hiring professors, the university hires at the junior level because the professors are not as expensive, Jorgensen said. With the donation, UT can hire at the senior level.

The higher-level candidates also help the students.

"Endowed professors bring unique opportunities to uni-

• See 'GIFT' Page A4

A4 | Thursday, October 5, 2006 | The Independent Collegian

GIFT

From last page

versities for students to learn from some of the top professors in a field," Kirchhoff said.

The chemistry department will hire a professor who is already an expert in research and is publishing in their field, Jorgensen said.

Because the new professor's expertise, the prestige of UT among other colleges will increase, and it will provide students with a great opportunity, Jorgensen said.

"The chemistry department strives for excellence in teaching, research and service to the profession, community and university," Kirchhoff said. "The Willard M. Bright Professorship will allow the department to recruit an outstanding educator and scientist to further enhance this mission."

Bright was honored at a dinner on Sept. 28 and at a luncheon on Sept. 29 by students and faculty in the chemistry department.

Quick Facts

Graduate school

- Willard M. Bright donated \$1 million to the UT chemistry department.
- Bright is a graduate of the 1936 class of UT.
- The donation will be used to establish a professorship within the chemistry department.

2006
Dr. Willard
Bright Gift

Department of Chemistry
The University of Toledo
Distinguished Graduate



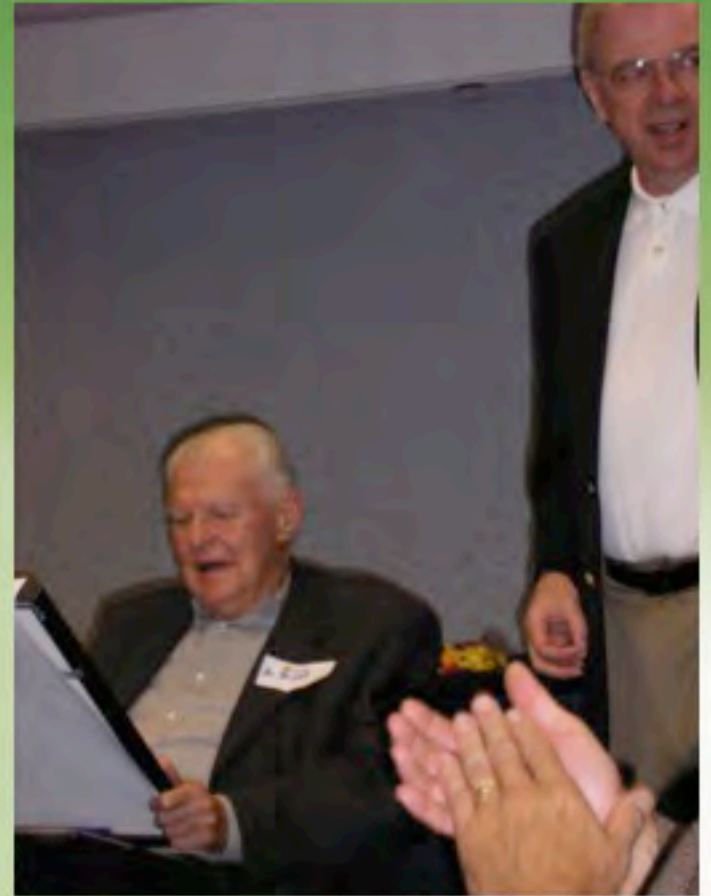
Willard M. Bright, Ph.D.
B.S., 1936; M.S., 1938
Founder and Chairman Emeritus
Zoll Medical Corporation
Chelmsford, MA



2006

Dr. Willard Bright
Celebration

2006 at Dr. Willard
Bright luncheon





2006
Dr. Willard
Bright
Celebration



2014 Kay Patton Wallace & Lance Thompson at dedication of Dr. Lancelot C.A. Thompson Meeting Room, SU 2592





2013 Dr. Joe Schmidt, Latino Summit



2015 Dr. Bellizzi Group



1980s



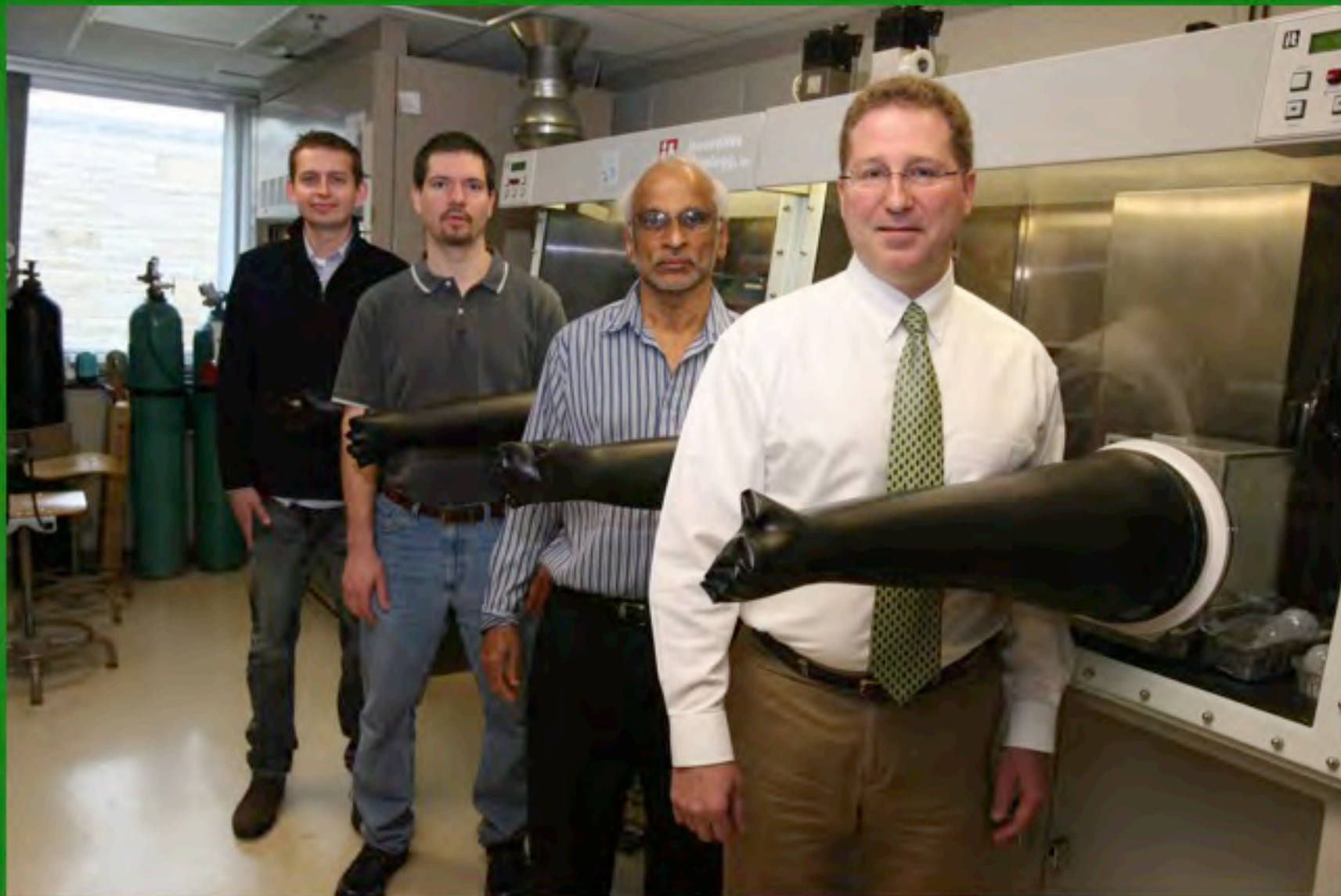
2010 Dr. Louis Echegoyen
visit



2011 Mallory Ladd,
undergraduate student



2014 Miriam Basiouny, Ph.D. Student
(Schmidt Group)



2010 Professors Mason, Tillekeratne,
Schmidt and Anderson



2007 in the lab



Master Plan



2012 Wolfe Hall



ACS

Chemistry for Life[®]



2003 Women in Science: Joanna Hinton, Edith Kippenhan, Brenda Snyder, Sherri Strickland



Aug 2014 Project SEED Symposium



PROJECT SEED

Hands-on Research
for High School Students

2015 Project SEED Symposium



2003 Nina McClelland,
Honorary Doctorate



2014 Varsity T inductees including
Nina McClelland



2014
Morteza Jandaghi,
Ph.D. student (Mason
Group)



1997 Dr. Yong Wah Kim, Scientific
Instrumentation Specialist



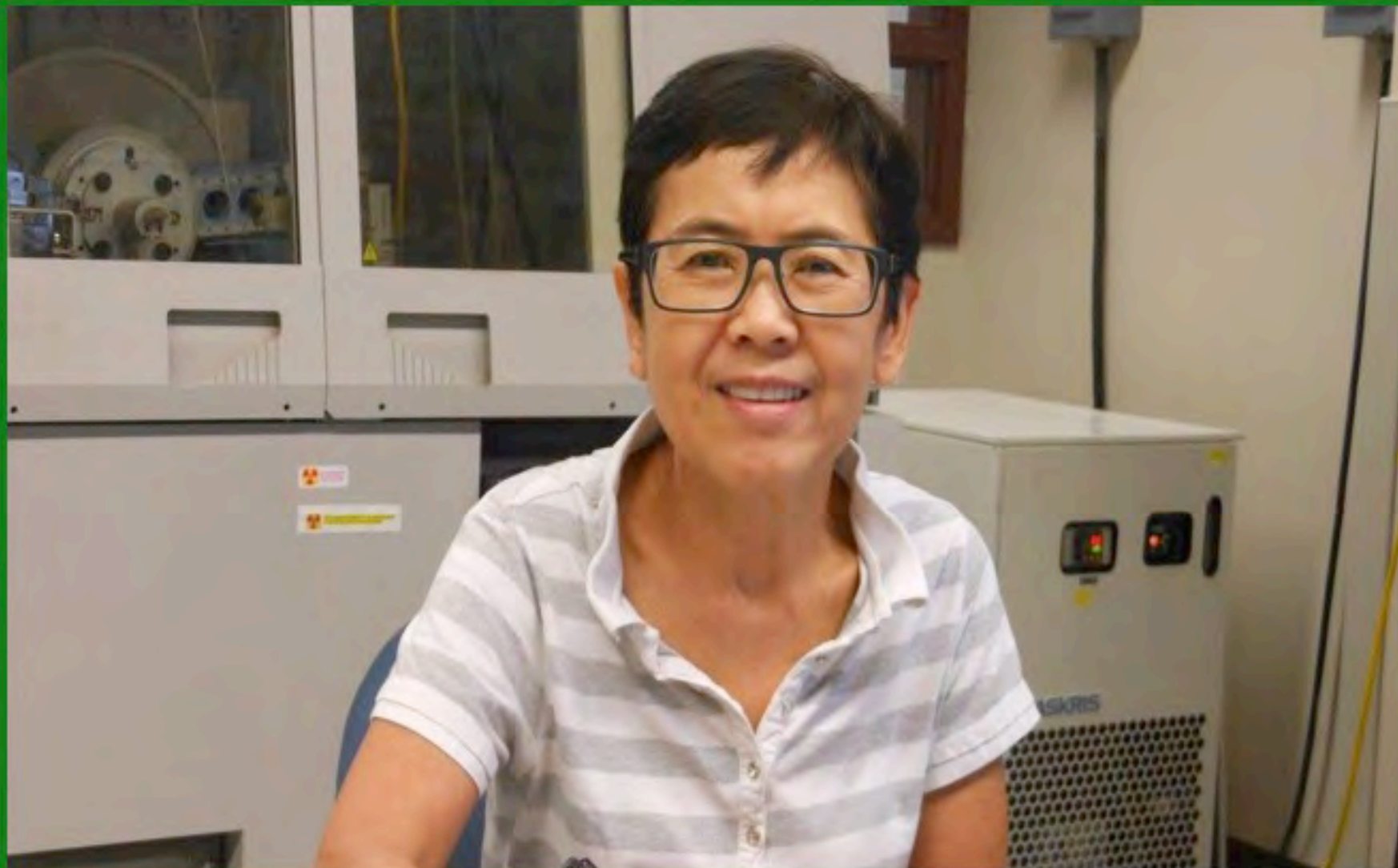
Early 1990s Secretarial Staff:
Char, Pam, Martha, Sandy and Jackie (sitting)



Dr. Edwards' Group



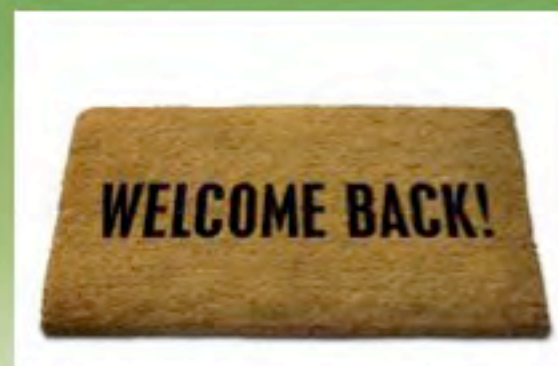
1990s Pannee Burckel,
Ph.D. student (Edwards)

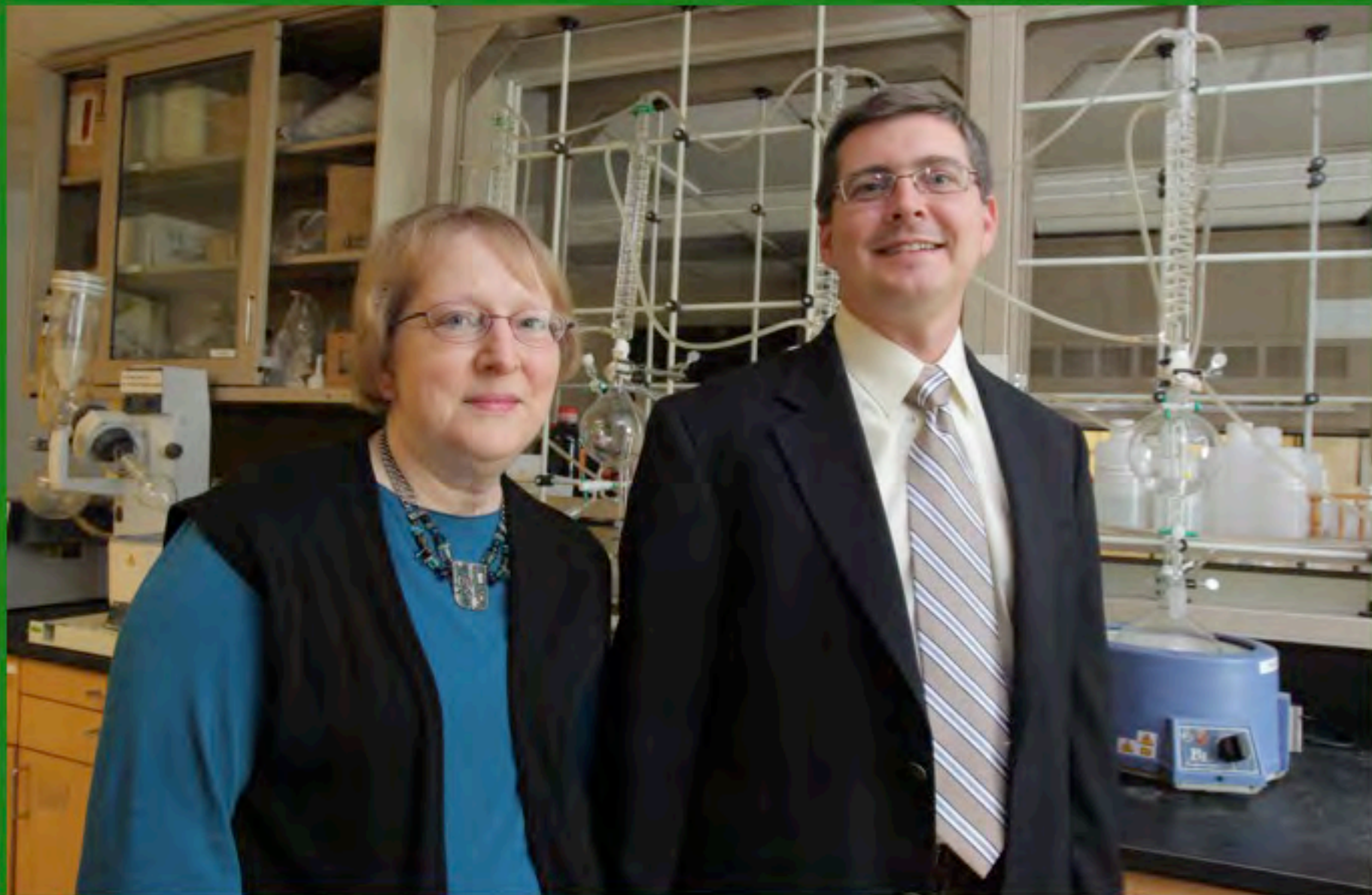


2015
Dr. Pannee Burckel, Staff
Instrumentation Specialist



2011 Paul Anastas ,
creation of the School
of Green Chemistry
and Engineering





2011 Collaborators: Kathy Wall, Medicinal Chemistry and Steve Sucheck, Chemistry



2014 Space Crystallization Group made up of members from the groups of Tim Mueser, Don Ronning and Connie Schall, Chemical Engineering



Paul Block was a research professor in the department. He synthesized thyromimetic compounds with therapeutic potential for prematurity in human infants. He was a pioneer in the field that is now referred to as medicinal chemistry. He benefited from access to the department's facilities, mostly the spectroscopy NMR, IR etc., and he was a benefactor to the progress fund.

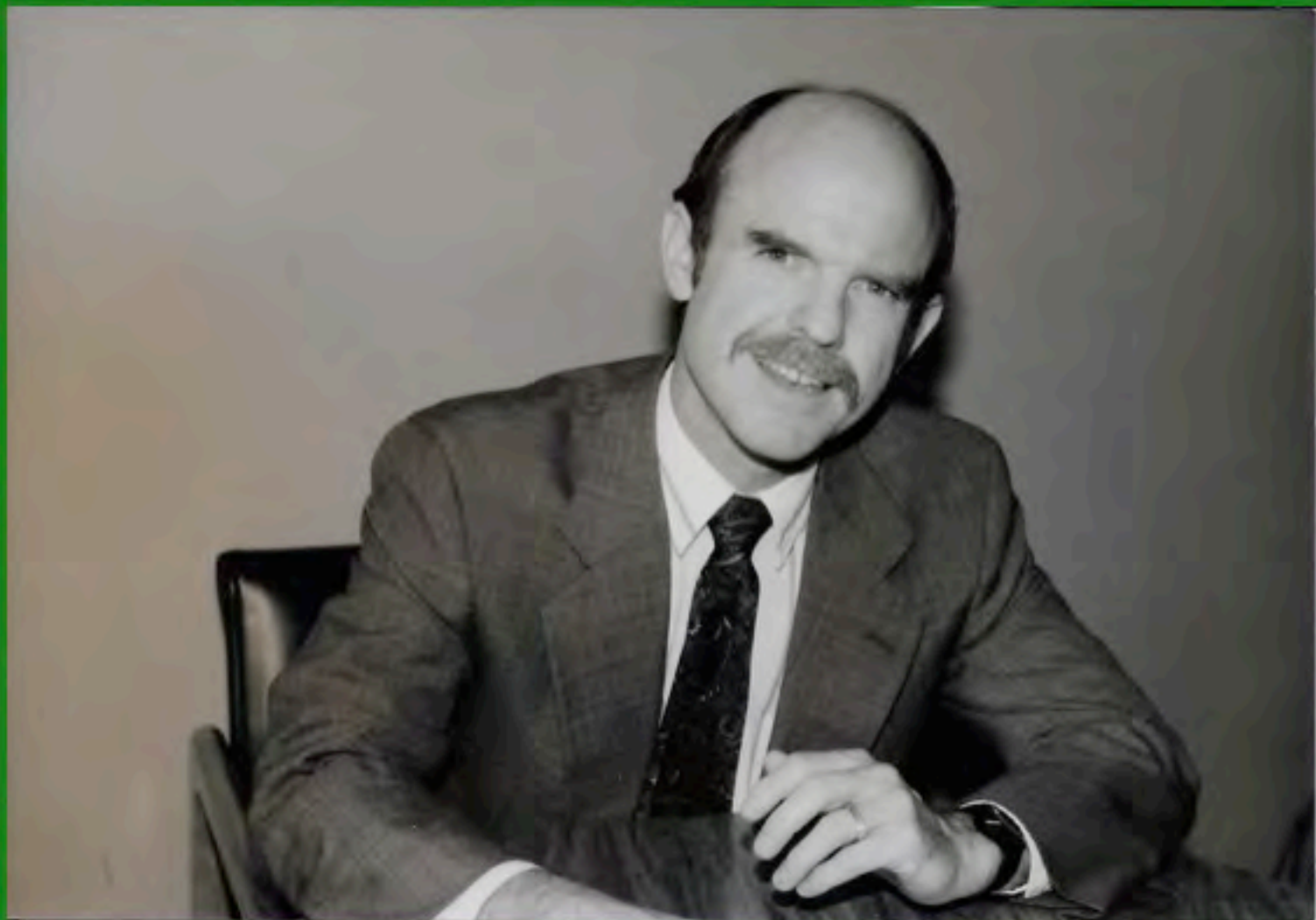
His greatest accomplishment to the community was the formation at the State level of the Medical College of Ohio.



1997 Dean Giolando



1990
Jon Kirchhoff



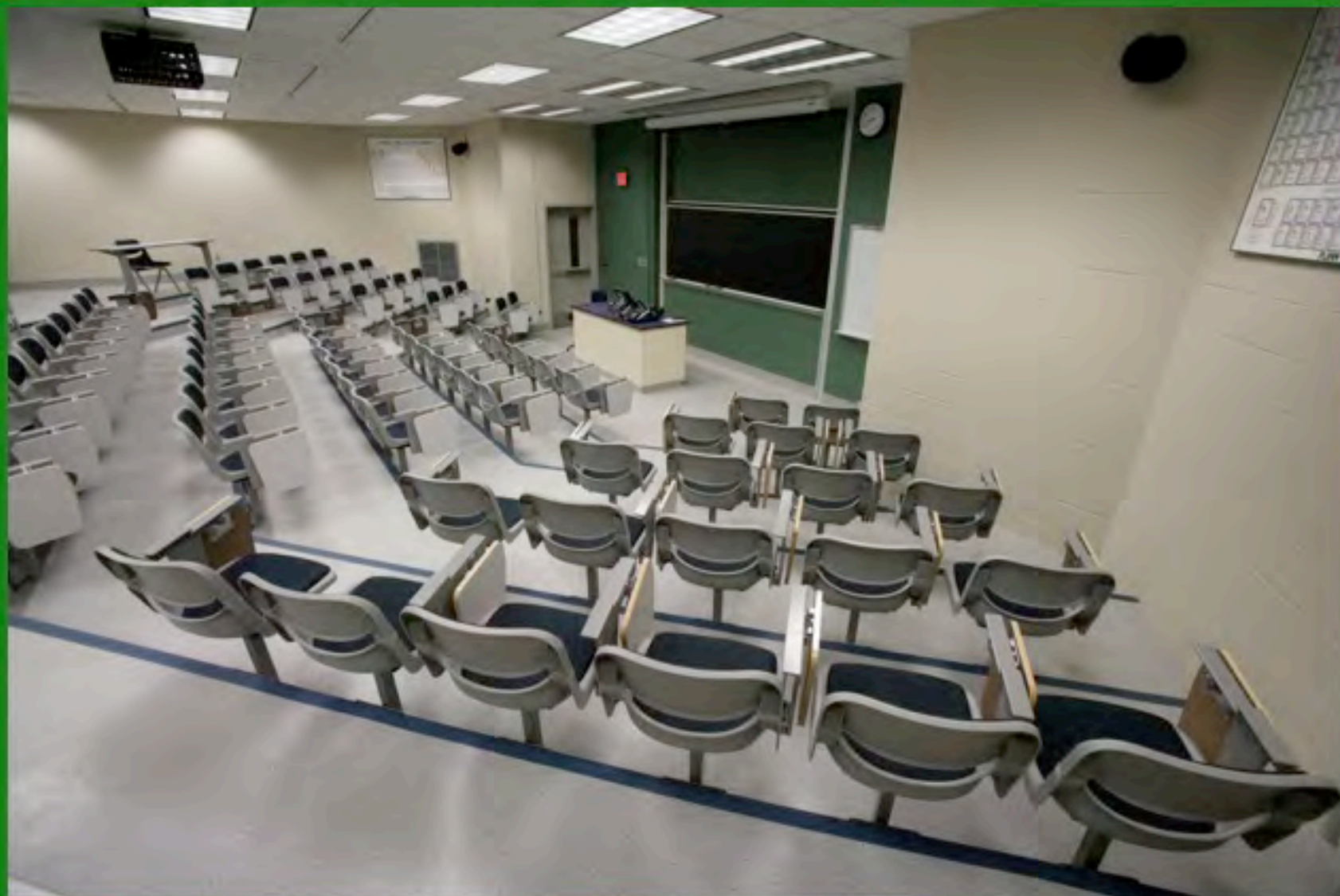
Prof Ken Houk, Frontiers in
Chemistry Lecture, 1990



1998 Mark Mason



Dr. Xiche Hu 1997



2007 Renovated BO lecture



2000 Help Center
Dedication: Philip
Kint





2000 Community Outreach
with Rocket Fest



2005 Collaborators: Drs. Kirchhoff, Jayatissa, Lukaszew, Huang and Hudson



Scott Kirchhoff, son of Jon Kirchhoff and Joanna Hinton



2008 Dr. Arden Bement Visit

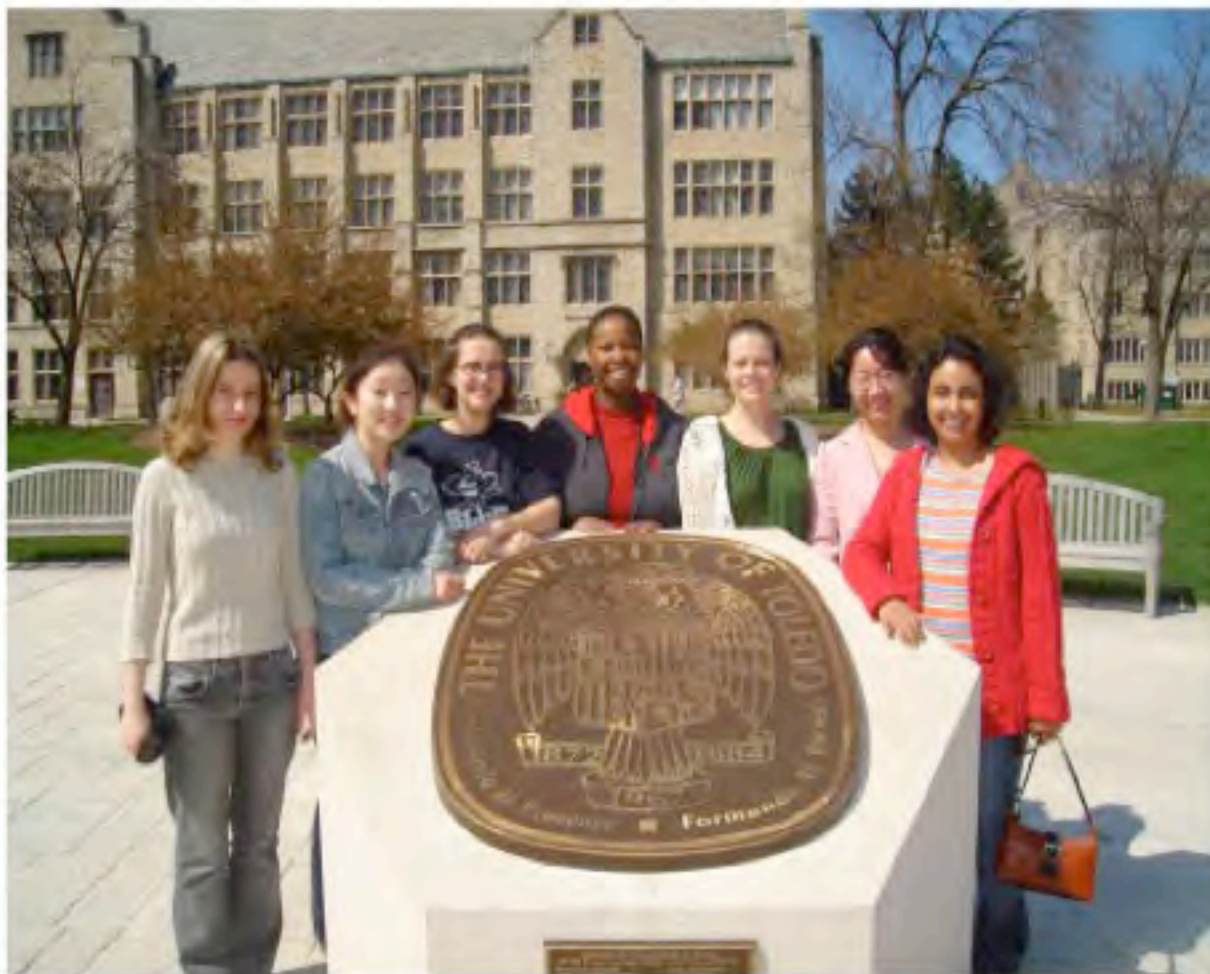


2008
Undergraduate,
Sharon Kramer



Staff: Jack Wise, Scott Roberts, Tom
Kina and Charles Davis

Current Kirchhoff Group Members, April 2007



(left to right): Claire Gegout, Isabel Cai, Maria McAtee, Shontell Wright, Kristi Cook, Jessie Jiang and Jhindan Mukherjee



2012 Green Chemistry Group



2011 Green Chemistry Speakers for establishment of School of Green Chemistry and Engineering



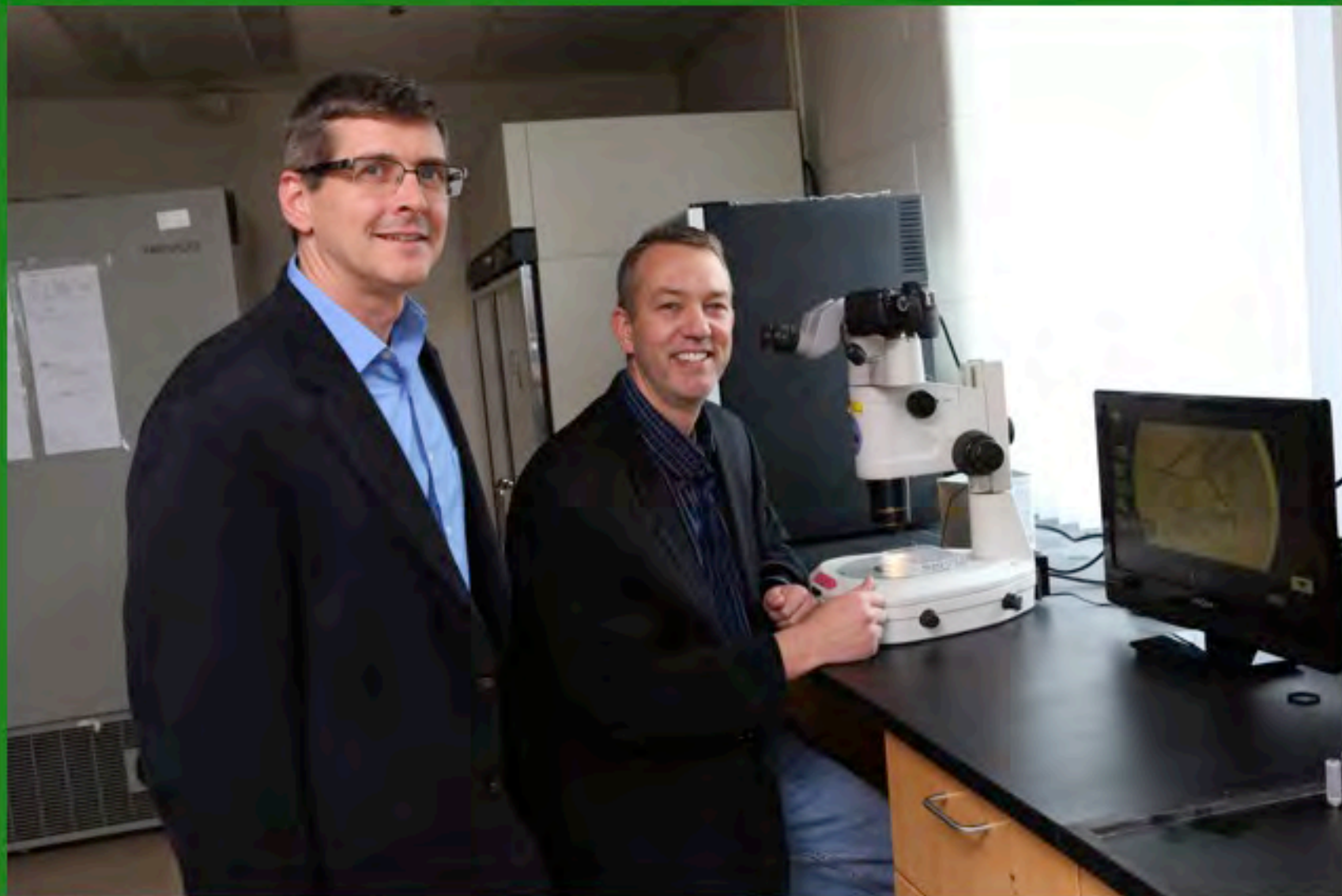
1960s



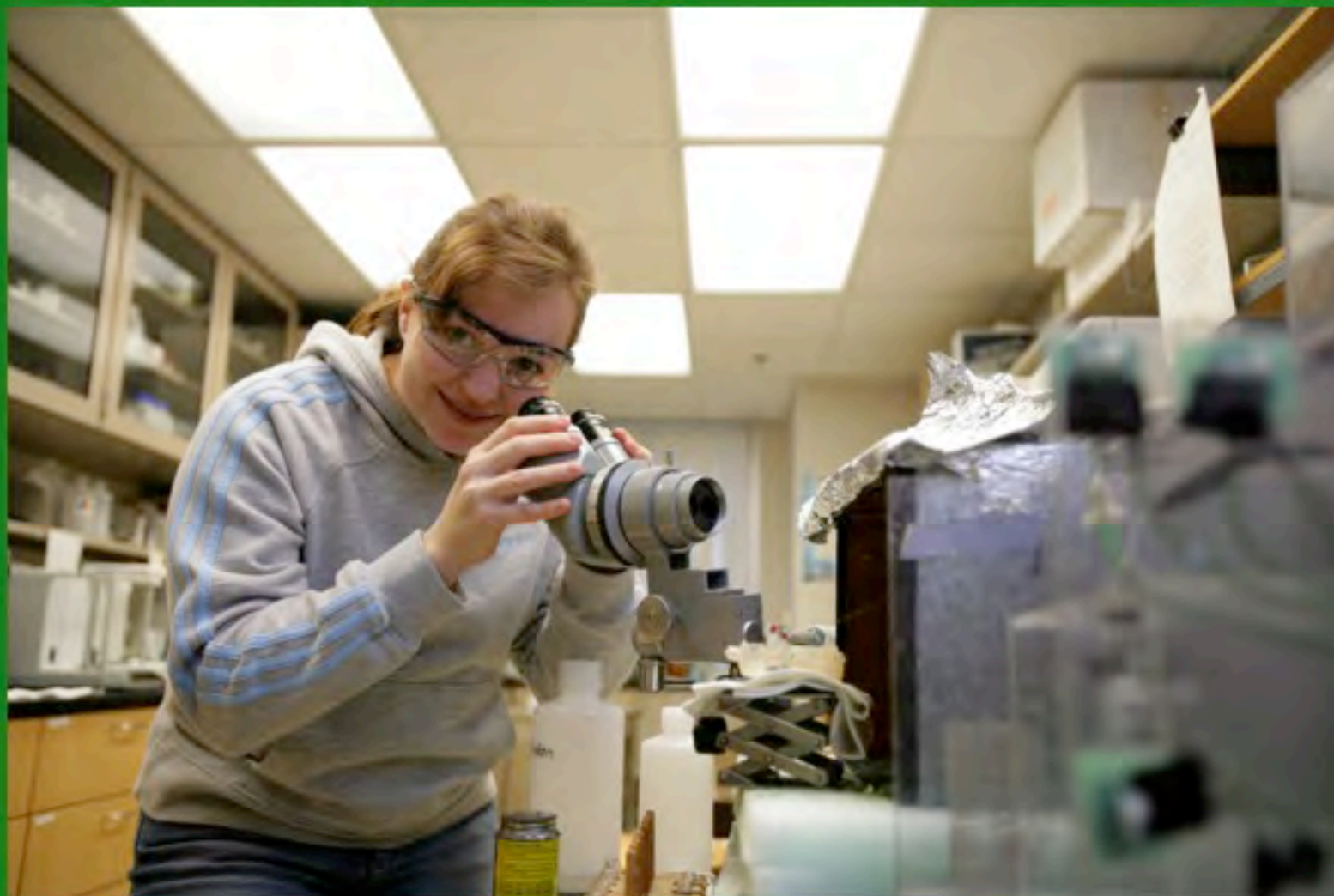
1997 Glassblower, Steve Moder



1990s Stockroom Staff



2013 Collaborators: Steve
Sucheck and Don Ronning



2006 Tatayna Barkhimer
Ph.D. student (Kirchhoff)

1972





UT 1932



UT 2010



2008



1997 Wolfe Hall Construction



Wolfe Hall is named for Frederic and Mary Wolfe and their family, who through the Wolfe Family Charitable Foundation, generously pledged \$1.5 million toward the new Pharmacy, Chemistry and Life Sciences Complex. Mr. Wolfe is chairman of First Toledo Corporation and a member of the UT Foundation Board of Trustees. Mrs. Wolfe, highly active in the local arts community, is a member of the newly formed Visual Arts Committee at UT. Mr. Wolfe's sister, Mrs. Marilyn Wolfe Allison, has also generously pledged \$100,000 to the new building.



Funding for the Wolfe Hall Dedication Symposium was generously provided by the Donors to the Department of Chemistry Frontiers in Chemistry Fund and through a grant from The University of Toledo Foundation Program for Academic Excellence.

The University of Toledo is committed to a policy of equal opportunity in education, employment, membership and contracts, and no differentiation will be made based on race, color, religion, sex, age, national origin, sexual orientation, veteran status or the presence of a disability. The University will take affirmative action as required by federal or state law.

AS 2012 298

Wolfe Hall Dedication Symposium



1998

Learning Through Discovery

May 13, 1998

Department of Chemistry
The University of Toledo
Toledo, Ohio



Schedule of Events

Wolfe Hall Dedication Symposium

Wolfe Hall, Room 1201

- 8:25AM Opening Remarks
James L. Fry, Vice President for Graduate
Studies, Research and Economic
Development, The University of Toledo
- 8:30 Gary A. Molander, Professor
of Chemistry, University of Colorado
at Boulder
*Metallocene Catalysis in the Selective
Synthesis of Small Molecules*
- 9:30 Kenneth N. Houk, Professor
of Chemistry, University of California
at Berkeley
*Rational Design of Supramolecular
Metal Complexes*
- 10:30 Morning Break
- 11:00 H. Mark Wightman, Kenan Professor
of Chemistry, University of North
Carolina at Chapel Hill
*Monitoring Neurotransmitters
in Real Time*
- 12:00 Lunch Break
- 2:30 John H. Drenth, Professor of
Structural Chemistry, University
of Manchester, United Kingdom
*The Structural and Biophysical
Chemistry of Proteins and Enzymes*
- 3:30 David Davies, Chief, Section of Molecular
Structure, National Institutes of Health,
Bethesda, Maryland
*Thyroglobulin Synthesis: A Paradigm for
Multi-Enzyme Complexes*
- 4:30 Afternoon Break
- 6:00 Cocktail Hour, Toledo Museum of Art,
Gallery Level, Classic Court
- 7:00 Dinner, Toledo Museum of Art, Gallery
Level, Libbey Court
- 8:00 Wendell Wierzbicki, Senior Vice
President, Parke-Davis Pharmaceutical
Research Division of The Warner-
Lambert Company, Ann Arbor, Michigan
The Power of Interdisciplinary Research



1998 Wolfe Hall Dedication
Symposium Speakers

1998 Wolfe Hall
Dedication
Symposium Reception



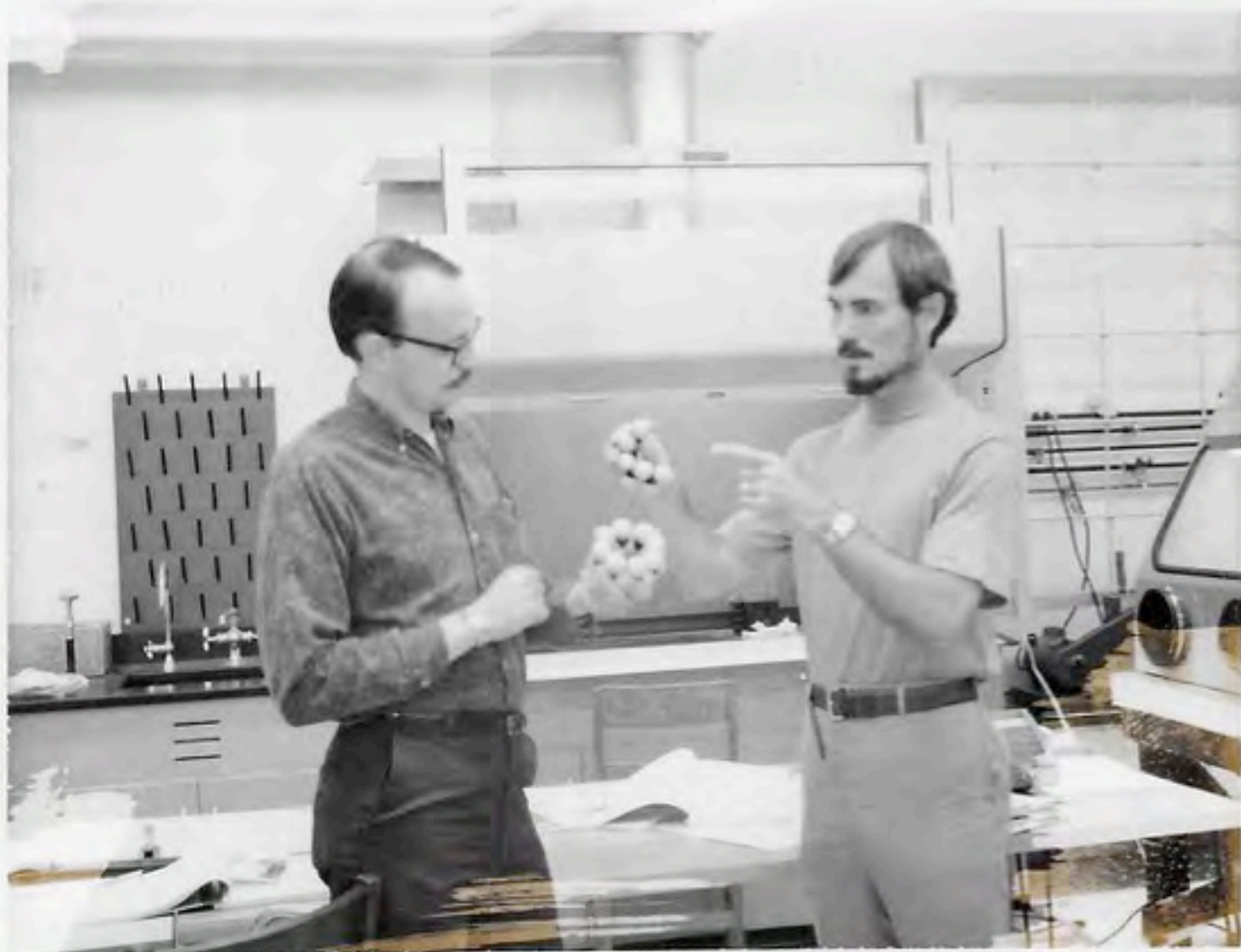


Wolfe Hall
Dedication
1998





Wolfe Hall
Dedication
Banquet
1998



Dr. Jimmie Edwards helping a student.



1999 Retirement Party for Jimmie Edwards, James Fry, James Gano and E. Jean Jacob



1999 Retirement Party



1999 Retirement Party



**Chemists
Have All The
Solutions**



2003
Personnel





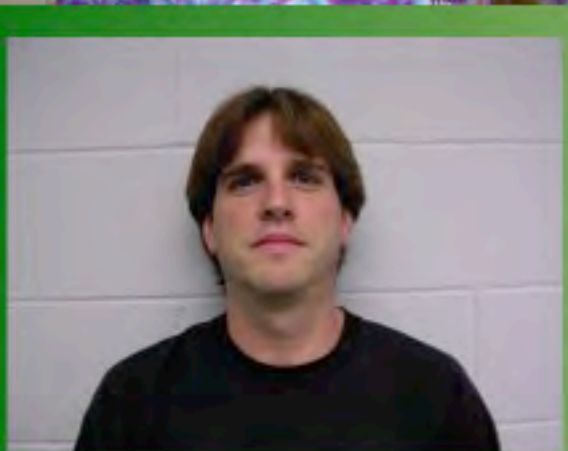
2003 Personnel



2003

Secretarial Staff:
Pam and Char and
still going strong in
2015!

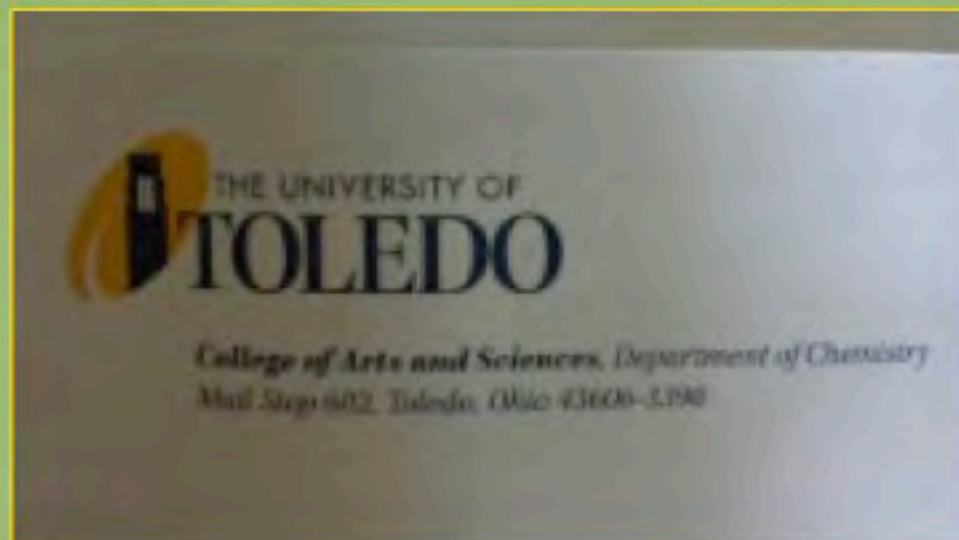




2003 Personnel



2007 Open House Poster Session



2015



2006 Chemistry Graduate Students



More 2006 Chemistry photos

CHEMISTS



DO IT WITH MOLES



2013 and 2014
Read for Literacy
Spelling Bee





Suheck group (top)

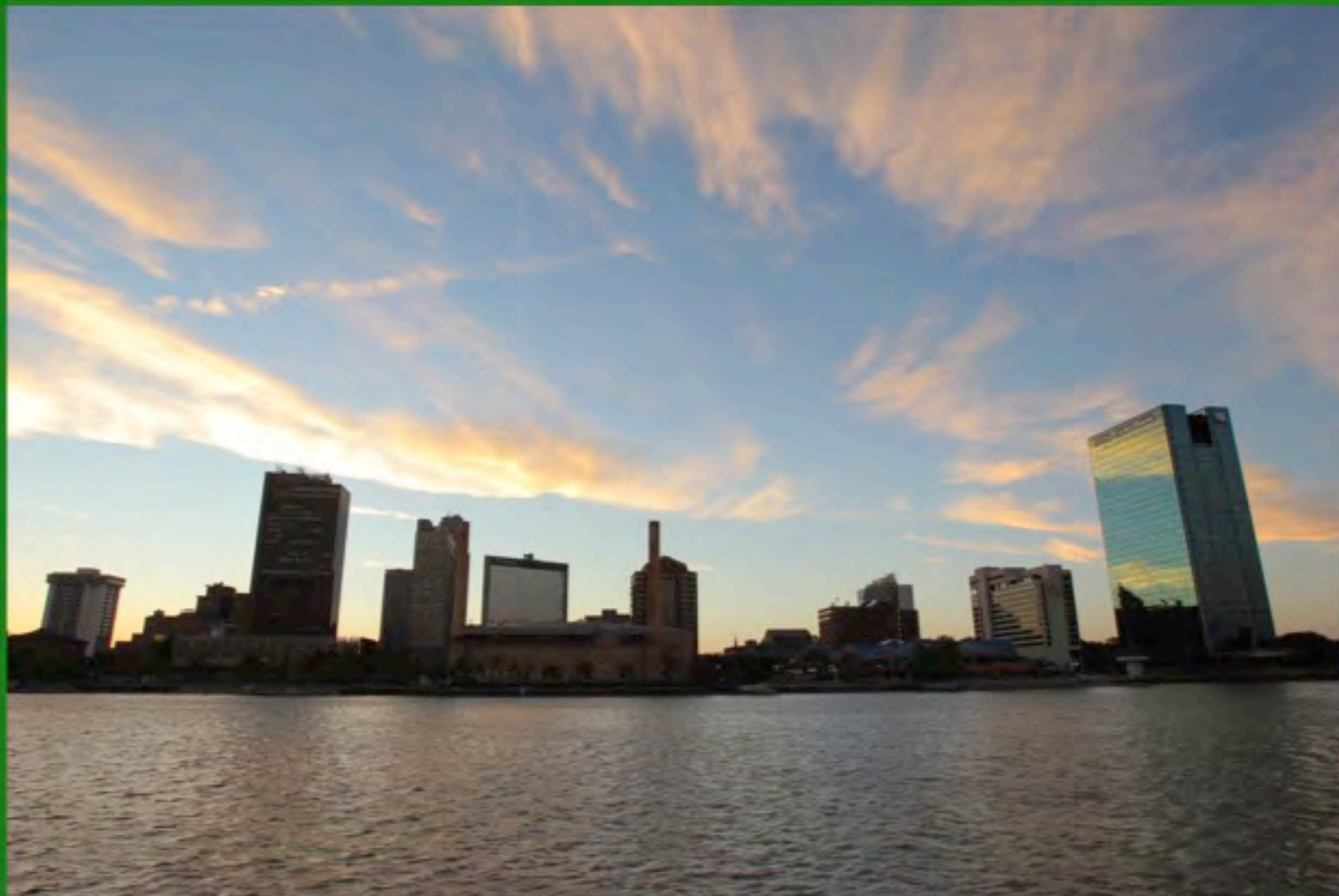




2015 SCOPE



University Hall 2011



City of Toledo 2010

Dr. Alan Pinkerton retirement
reception at Ferdo's, 2014





Past, Present and Future

THE UNIVERSITY OF TOLEDO
DEPARTMENT OF CHEMISTRY
AND BIOCHEMISTRY

Dr. Paul Anastas
introduces Dr. John C.
Warner at Centennial
Lecture, September 30,
2015 at Doermann
Theater.



Green Chemistry is the *design* of chemical products and processes that reduce or eliminate the *use and/or generation* of hazardous substances.



Dr. John Warner, Centennial Speaker, gives the definition of what green chemistry is at his lecture entitled, "Green Chemistry: The Missing Element", September 30, 2015.





Reception hosted by Toledo Section of the American Chemical Society after the talk was held in Libbey Hall.

President Sharon Gaber with Nina McClelland, Cora Lind-Kovacs and Brenda Snyder gave opening remarks.

Frank Butwin (middle) Chairman of the Toledo Section of the American Chemical Society thanked everyone for coming. Pictured with Andy Jorgensen and Lance Thompson.









Toledo Section ACS Officers: Jim Zubricky, Andy Jorgensen, Frank Butwin, Joanna Hinton and Brenda Snyder

John Warner and Paul Anastas
in discussion



Jon Kirchhoff recognizes Kristen Rockwell, Anthony Wayne Senior, BASF Science Academy attendee and future chemist at The University of Toledo!



**Toledo Section ACS Sponsored Reception:
Nina McClelland introduces President
Dr. Sharon Gaber**





ACS -Toledo Section President Frank Butwin speaks at reception.

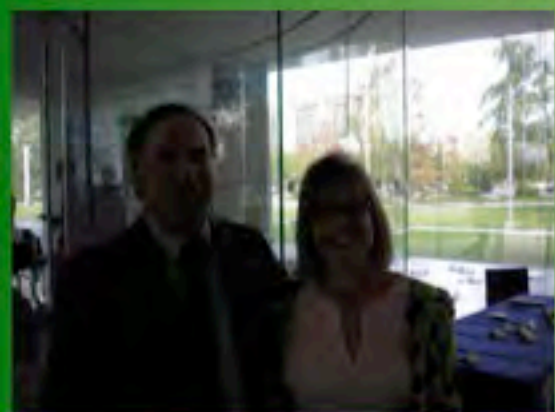


The Banquet was held October 1, 2015 at the GlasSalon at the Toledo Museum of Art.



Bob and Mary Ann Niedzielski and Jon Kirchhoff watch the slide show. Lance and Naomi Thompson enjoy the slide show, too.







Jon Kirchhoff, Chair, welcomes everyone to the 100th celebration!





Interim Provost John Barrett, welcomes guests to the Centennial Celebration.





Paul Anastas, Betsy
Brady and Nina
McClelland



Nina McClelland introduces Daniel Liu the future of chemistry. He was the recipient of the 2015 National "You Be the Chemist Challenge" which included a trip to Philadelphia, trophy and \$10,000 check for college.





Paul Anastas providing closing comments.

100 YEARS

Past, Present and Future

THE UNIVERSITY OF TOLEDO
DEPARTMENT OF CHEMISTRY
AND BIOCHEMISTRY

Centennial Lecture

Dr. John C. Warner
Green Chemistry: The Missing Element

Dr. Warner is President and Chief Technical Officer of the Warner Sabcock Institute for Green Chemistry, as well as President of The Beyond Boron Foundation.

Wednesday, Sept. 30, 2015, 4 p.m.
Doermann Theater, The University of Toledo

DR. WARNER'S LECTURE IS FREE
AND OPEN TO THE PUBLIC. CONTACT
419.530.1907 FOR ADDITIONAL DETAILS.



Donors to the Department of Chemistry Frontiers in Chemistry Fund

The University of Toledo Alumni Association Natural Sciences and Mathematics Alumni Affiliate

Sigma Aldrich

Toledo Section of the American Chemical Society

UT Achieves-Barbara Floyd, Interim Dean, Libraries

Charlene Hansen and Joanna Hinton

Faculty, staff, students, research personnel, alumni through the years