



The Bulletin
of the
Virginia Section
AMERICAN CHEMICAL SOCIETY

NOVEMBER MEETING NOTICE

**University of Mary Washington
Fredericksburg, Virginia**

Friday, November 9, 2007

SOCIAL HOUR: **6:00 p.m.**
Faculty Dining Room
Seacobeck Hall
College Avenue

DINNER: **6:30 p.m.**
Faculty Dining Room
Seacobeck Hall

PROGRAM: **7:30 p.m.**
Room 100, Jepson Science Center, College Avenue

MENU: Tossed Salad with Assorted Dressings, Carved Turkey, Virginia Ham with Raisin Sauce, Homestyle Stuffing, Mashed Potatoes with Gravy, Fresh Green Beans, Dilled Baby Carrots, Yeast Rolls with Whipped Butter, Double Chocolate Layer Cake, Pumpkin Pie, Coffee, Hot Tea, Iced Tea

PRICE: Members /Guests - \$22.00; Students, High School Teachers, Retired ACS Members/Spouses, Retired Teachers/ Spouses - \$11.00

DINNER RESERVATIONS: Please make reservations by **NOON on Tuesday, November 6** by calling The University of Mary Washington at (540) 654-1016.

HOST: Dr. Roy F. Gratz, (540) 654-1412, rgratz@umw.edu

SPEAKER: **Dr. W. H. Jack Breazeale**
College of Charleston/Laboratory Safety Institute

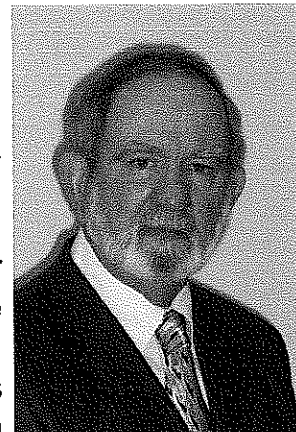
TOPIC: **“Lab Inspections: You Might Be Surprised By What You Find!”**

NOVEMBER 2007

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		<i>reservations</i>			<i>meeting</i>	
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Dr. Jack Breazeale

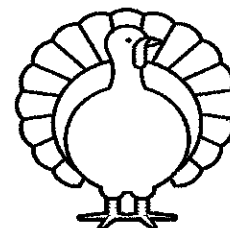
Dr. Jack Breazeale received his Ph.D. from the University of South Carolina in 1966. He taught at Winthrop College in Rock Hill, SC from 1965-1970. In 1970 he was a founding faculty member of a new state college in Florence, SC: now Francis Marion University. From 1970 until his retirement in 1997, he was chair of the Department of Chemistry and Physics and Professor of Chemistry. Dr. Breazeale has been active in the American Chemical Society for over 40 years. He has served nine years as a member of the ACS Committee on Chemical Safety including three years as chair. He also held offices in the ACS Division of Chemical Health and Safety including that of chair. Other activities at the national level have included appointments to the Committee on the Economic Status of Chemists, the Committee on Constitution and Bylaws, the National Chemistry Week Task Force with three years as chair, and the Board of Trustees for Group Insurance Plans for ACS Members. He is currently a member of the Council Committee on Committees. At the local level, Dr. Breazeale has held several offices in the South Carolina Section, including chair, and currently serves the Section as Councilor. His interest in laboratory safety became a major professional activity in the early 1980s in the South Carolina Section. Dr. Breazeale has presented Laboratory Safety Institute workshops for some twenty years. These presentations include one-, two-, and four-day workshops nationwide on various safety topics. He presently serves on the Board of Trustees of the Laboratory Safety Institute. He resides in Mount Pleasant, SC and is an Adjunct Professor of Chemistry at the College of Charleston.



“Lab Inspections: You Might Be Surprised By What You Find!”

The presentation will include discussions on: 1. How often should formal laboratory inspections take place? 2. Who should take part in such inspections? 3. Who is responsible to ensure that such inspections take place? 4. What should be included on the inspection check sheet? 5. What are some references to consult as you prepare your inspection check sheet? The talk is applicable to all types of laboratories in which chemicals are utilized - industrial, academic, research, medical, and governmental. The presentation will include numerous actual photographs of good and bad laboratory practices. Some of the photographs will surprise you, some will shock you, and some you may recognize as representing situations at your facility. A number of important safety issues will be discussed based on the photographs.

**HAPPY
THANKSGIVING**



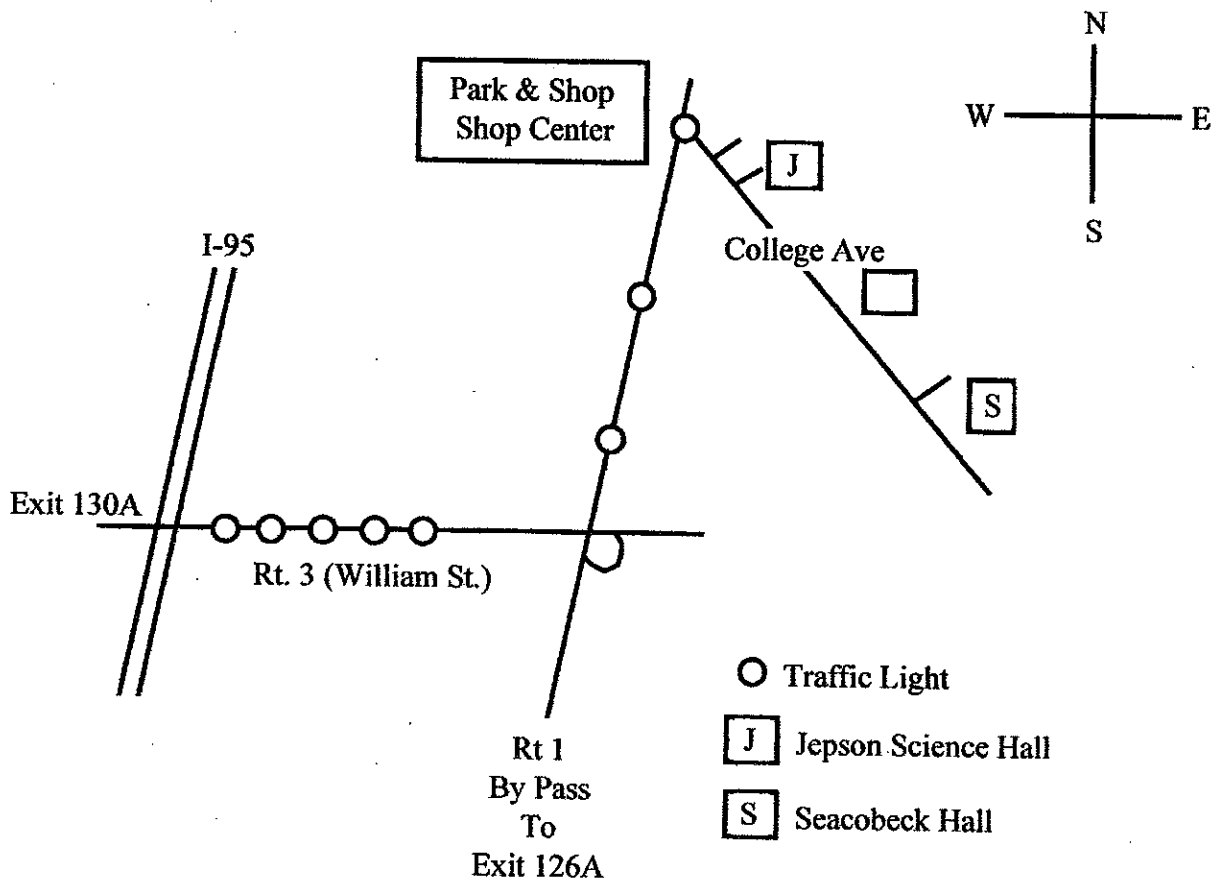
DIRECTIONS

Fredericksburg is located just off I-95, about 50 miles north of Richmond.

Traveling from the south on I-95, take Exit 126A, Rt. 1, north to Fredericksburg. Stay on the Rt.1 bypass (a four-lane divided highway, with the usual interstate exit clutter for the first mile) for about four miles until you get to College Avenue (traffic light, across from the Park and Shop Shopping Center with a Giant Food store). Turn sharp right on to College Avenue and make the second left (< 1/4 mile) into the parking lot at the Jepson Science Center, or park on College Avenue. Walk along College Avenue to the second building past Jepson Hall; enter Seacobeck Hall by the north rear door.

From the west, come into Fredericksburg on Rt. 3 (William Street). About one mile from I-95 (Exit 130A) turn north on the Rt. 1 bypass (turn right on the cloverleaf after passing under Rt. 1). Go about one mile until you get to College Avenue (3rd traffic light, across from the Park and Shop Shopping Center with a Giant Food store). Turn sharp right on to College Avenue and make the second left (< 1/4 mile) into the parking lot at the Jepson Science Center or park on College Avenue. Walk along College Avenue to the second building past Jepson Hall; enter Seacobeck Hall by the north rear door.

MAP OF THE UNIVERSITY OF MARY WASHINGTON



*** VIRGINIA SECTION NEWS ***

FUTURE MEETINGS

DATE: **December 7, 2007**
 LOCATION: John Tyler Community College
 Chester, VA
 HOST: Dr. Kristine Smetana
 PHONE: (804) 706-5143
 E-MAIL: ksmetana @ jtcc.edu
 SPEAKER: **Dr. Marilyn T. Miller**
 TOPIC: "CSI and Forensic Science:
 Real vs Reel"

DATE: **January 18, 2008**
 LOCATION: Science Museum of Virginia
 Richmond, VA
 HOST: Mr. Ken Chapman
 PHONE: (804) 448-4852
 E-MAIL: kmc97 @ aol.com
 SPEAKER: **Mr. James Kessler**

Presentation of Teaching Awards

DATE: **February 8, 2008**
 LOCATION: University of Richmond
 Richmond, VA
 HOST: Dr. Carol Parish
 PHONE: (804) 484-1548
 E-MAIL: cparish @ richmond.edu
 SPEAKER: **Dr. Roald Hoffmann**
 (POWELL LECTURESHIP)

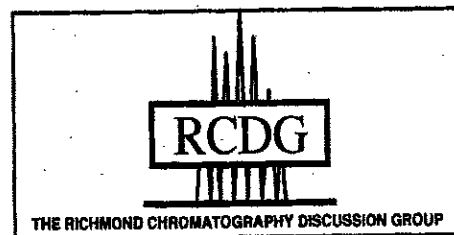
RCDG

The RCDG meets monthly for discussions of topics related to chromatography. For more information on RCDG or its meetings, check their website: www.rcdg.org. The next RCDG meeting:

November 7, 2007

"Mass Spectrometric Studies of Protein Modifications from Oxidative Stress"

Dr. Scott Gronert, Professor Organic and Biological/Biophysical Chemistry, Virginia Commonwealth University



CHEMISTRY SEMINARS AT VIRGINIA COMMONWEALTH UNIVERSITY

Tuesday, Oct. 30 - **Dr. Zeev Rosenzweig**, University of New Orleans and NSF, "Quantum Dot-based Probes for Bioassays"

Thursday Nov. 1 - **Dr. Michael Vadala**, Virginia Tech

Tuesday, Nov. 6 - **Dr. Francis Zamborini**, Department of Chemistry, University of Kentucky at Louisville

Thursday, Nov. 8 - Dr. James C. Fishbein, Department of Chemistry and Biochemistry, University of Maryland, Baltimore County

Thursday, Nov. 29 - Dr. Adrian Parsegian, NIH, "Van der Waals Forces,"

Seminars are held at 3:30 p.m. in the Kapp Lecture Hall, Room 1024, in the Mary E. Kapp Wing of Oliver Hall, 1001 West Main Street. Call (804) 828-1298 for more information.

CHEMISTRY SEMINARS AT THE UNIVERSITY OF VIRGINIA

November 2 - Professor James Engstrom, Cornell University, "The Dynamics of Growth of Organic Thin Films using Supersonic Sources: Trends, Observations and Surprises"

November 9 - Professor Paul Axelsen, University of Pennsylvania, "Oxidative Stress in Lipid Membranes and the Misfolding of Amyloid Beta Proteins in Alzheimer's Disease"

Chemistry colloquia are held at 4:00 p.m. in Room 304 of the Chemistry Building. The complete colloquium schedule is on-line at <http://www.virginia.edu/chem/newsandevents/seminars/>.

CHEMICAL ENGINEERING SEMINARS AT THE UNIVERSITY OF VIRGINIA

November 1 - Professor Michael Lawrence, Department of Biomedical Engineering, University of Virginia, "Assessing Selectin Bond Formation Probability Using Micropatterned Ligands"

November 15 - Professor Jeffrey Reimer, Department of Chemical Engineering, University of California (Berkeley), "Magnetic Resonance and the Design and Analysis of Systems Governed by Physical and Chemical Rates"

November 29 - Robert L. Hirsch, Senior Energy Policy Advisor, SAIC, "The Peaking of World Oil Production and Its Mitigation"

Seminars are held at 11:00 a.m. in Room 005 of the Chemical Engineering Building. Call (434) 924-7778 or check www.che.virginia.edu/seminar.html for more information.

TEACHING AWARDS

The December meeting of the Virginia Section will be held at John Tyler Community College in Chester on Friday, December 7. The Section's teacher awards will be made at this meeting. Awards will be presented to a high school chemistry teacher and to a middle school science teacher.

CHEMISTRY AT THE UNIVERSITY OF MARY WASHINGTON

After forty years in Combs Hall, the chemistry program at the University of Mary Washington is now beginning its tenth year in the Jepson Science Center. The facility provides student research space; modern teaching labs, including an organic chemistry lab with hood space for every student; and state-of-the-art multimedia and Internet capabilities. Seven full-time faculty teach a traditional chemistry major with 10-15 graduating seniors each year. In addition to the standard majors' courses, the program requires of all students a senior-level course on organic structure determination, separations, and spectroscopy and one seminar presentation. A full year of biochemistry is available as an elective, as are courses in instrumental analysis and environmental chemistry. The general chemistry and analytical programs use several cooperative, discovery-based experiments in the laboratory. The department is well-equipped, providing all students with hands-on experience with a variety of techniques and instruments, including H-NMR, C-NMR, FT-IR, GC/MS, ICP, and a scanning probe microscope. There are numerous computers for student use in the labs, classrooms, and the chemistry computer room. UMW chemistry graduates have earned advanced degrees at schools such as UVA, VCU, MIT, Princeton, Florida, Johns Hopkins, and Maryland and medical degrees at UVA, MCV, and EVA. Other graduates have gone directly to work at government labs including NIH, the Naval Research Lab, and the Patent Office, or for industries such as Dow Chemical, Philip Morris, Wyeth, and Virginia Power.

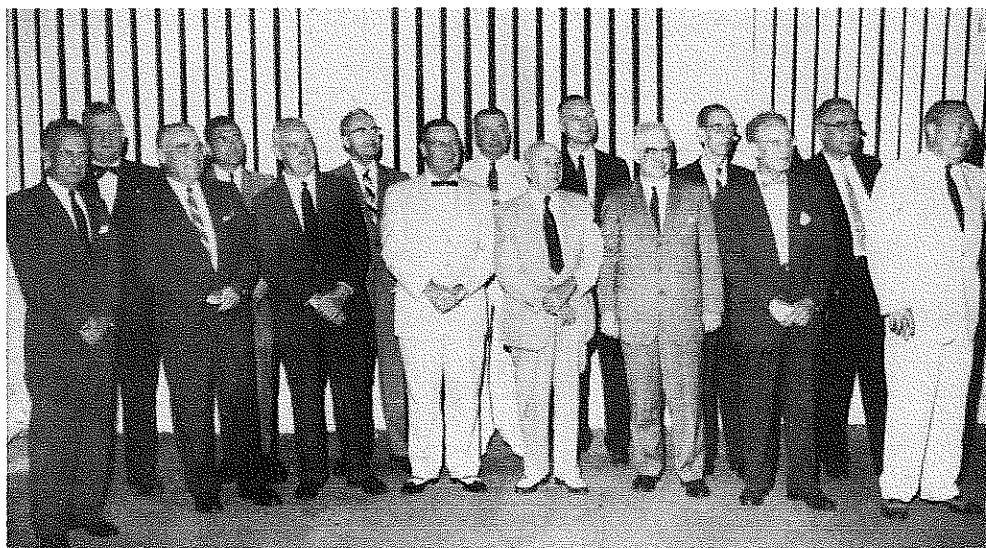


JEPSON SCIENCE CENTER
AT
THE UNIVERSITY OF
MARY WASHINGTON

QUESTIONS FROM THE PAST

This question was asked in the October issue of the Bulletin: When Dr. Jeffrey Seeman gave the Awards talk at the September 14 meeting, it marked the fourth time that he had spoken at a Section meeting. This feat tied him with two other individuals, both of whom are still active in the Virginia Section. **Who are the other two persons who have given four presentations at Section meetings?** Each of these three persons has spoken four times to the Virginia Section: **Dr. Ralph Allen** (1986, 1991, 2002, 2003); **Dr. Lidia Vallarino** (1974, 1982, 1994, 2002); and **Dr. Jeffrey Seeman** (1980, 1991, 1996, 2007).

New question: The photo below of fifteen past-chairs of the Virginia Section appeared on the cover of an issue of the Bulletin. **What year was that—1950, 1960, 1970, or 1980?** Bonus points if you can identify some of the persons shown.



GRANTS FOR K-12 SCIENCE PROJECTS

The Virginia Section is soliciting proposals for grants to support school science projects in grades K through 12. The \$50 to \$500 grants will be provided to teachers in the Virginia Section for the purchase of materials and supplies. To apply for support, request an application form from Ryan Warren, 6001 Grove Avenue, Richmond, VA 23226; (804) 288-2804; warrencr @ vcu.edu. Or complete an application on-line by accessing the Virginia Section website at <http://membership.acs.org/VVA/grants.htm>.

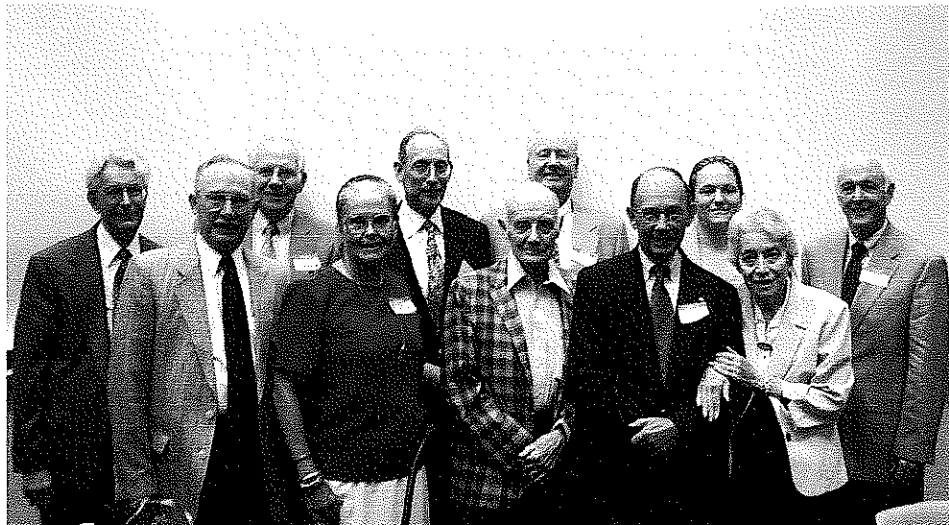
QUAGLIANO FELLOWSHIP

The James V. Quagliano Fellowship in Chemistry has been established in the Department of Chemistry at Virginia Commonwealth University. Fellowships are granted to Ph.D. chemistry graduate students at VCU. Dr. James V. Quagliano (1915-2005) was a distinguished educator and researcher in the area of inorganic and coordination chemistry. He taught chemistry courses at VCU for a few years after his retirement from the Hudson Chair in Chemistry at Auburn University. Jim was an active member of the ACS. The Quagliano Fellowship was endowed by his children (John R. Quagliano, Peter V. Quagliano, and Mary L. Quagliano Blunt) and by his wife, Lidia M. Vallarino. More information on the Fellowship can be obtained from the Chemistry Department at VCU – phone (804) 828-1298.

WORDS OF WISDOM FOR NOVEMBER: *Don't Point a
Finger – Lend a Hand*

DISTINGUISHED SERVICE AWARD RECIPIENTS

Eleven persons who have received the Virginia Section's Distinguished Service Award attended the September 14 Awards Meeting at Virginia Commonwealth University.



Left to Right:

Jim Beck (1991)
Pat Barber (2001)
Bill Rademaker (2006)
Sheryl Baldwin (1996)
Jeff Seeman (2007)
John Fenn (2004)
Bill Kuhn (1985)
Bill Welstead (1983)
Ann Sullivan (2005)
Lidia Vallarino (2002)
Phil Burks (1998)

JOURNAL OF VIRGINIA SCIENCE EDUCATION

The Virginia Association of Science Teachers (VAST) has launched a new publication, the *Journal of Virginia Science Education*. Its goal is to contribute to strengthening the teaching and learning of science. Articles are solicited from teachers, teachers-to-be, school administrators, college science educators, informal science educators, and others with experience in science education. More information can be obtained on the VAST website: www.vast.org.

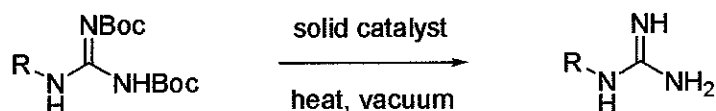
ABSTRACTS OF POSTER PRESENTATIONS APRIL 13, 2007 - UNIVERSITY OF VIRGINIA

Implementing Computer-Based Data Collection into Lower-Level Physics Laboratory Curriculum.
Fabrian Keels, Florence Etop and Colleen M. Taylor, Department of Chemistry and Physics, Virginia State University, Petersburg VA 23806

Standard methods for lab studies have become less helpful for undergraduate students due to outdated equipment. Students are at a disadvantage using older experimental methods for laboratory experiments that do not incorporate computer-based methodology that would be pertinent in the future workforce of skilled engineering, science and technology majors. Through the laboratory computer program Logger Pro, students are provided with instruments that allow for the collection of real-time, accurate data, which leads to the successful calculation and reflection of laboratory objectives. Thus, a gradual conversion from the previous system of manual collection to a technology-based technique provides for a more successful laboratory experience.

Solvent-Free Deprotection of Boc Protected Alkylguanidines. Asako Kubota and Janet Asper, Department of Chemistry, University of Mary Washington, Fredericksburg, VA 22401

Alkylguanidines are known to participate in various biological processes and are used to treat a wide range of medical conditions. These compounds are very soluble in aqueous environment due to guanidine's (CN_3H_5) strong basicity; therefore, protecting groups are necessary to carry out syntheses involving alkylguanidines. Based on a literature precedent of a successful solvent-free deprotection of *tert*-butoxycarbonyl (Boc) protected amines, Boc protected alkylguanidines were adsorbed onto silica gel or basic alumina and heated under low pressure. Test reaction results will be presented which shows Boc deprotection at 120 °C when heated for 24 hours.



The Activation of the Protein Phosphatase PP2C-alpha Via the Metal Ions Mg^{2+} , Mn^{2+} , and Fe^{2+} . Daniel Scott Lutterbie and Daniel McCain, Department of Chemistry, Virginia Military Institute, Lexington VA 24450

PP2C α is a human protein phosphatase from the PPM subfamily. It is a protein known to regulate stress signaling in cells by dephosphorylating various kinases. PP2C α can be activated using the metal ions Mg^{2+} , Mn^{2+} or Fe^{2+} which are required as cofactors for the enzyme. This was shown in a paper by Fjeld and Denu in 1999 (J. Biol. Chem 274:20336). When Fjeld and Denu did this experiment was performed however it was done under ideal conditions of 25 degrees C and saturating substrate concentrations, and a substrate (pNPP) that is easily hydrolyzed. Our lab is curious as to how well the Mg^{2+} and Mn^{2+} as well as Fe^{2+} will activate PP2C α under more physiological conditions. As a start, we are using phenyl phosphate as a substrate which is less easily hydrolyzed and therefore more closely approximates the phosphothreonine substrates that PP2C would encounter under physiological conditions.

Characterization of Fatty Matter in Cold Process Soap by ^{13}C NMR Spectroscopy. John Roberts, Andrew McLeod, Robert O'Cain and Kevin Dunn, Department of Chemistry, Hampden-Sydney, VA 23943

The purpose of this project is to analyze the composition of fatty matter in cold process soap by extracting excess oil from soap and performing ^{13}C NMR. The three oils which were used in the soap making process were olive oil for which oleic acid is the main fatty acid, castor oil for which ricinoleic acid is the main fatty acid, and grapeseed oil for which linoleic acid is the main fatty acid. Each soap contained 90% palm oil and 10% of the respective oil. It was found that composition of fatty matter in cold process soap does not differ depending on whether or not the minor oil was early or late in the saponification process. In all three cases, the percent of unsaturated fatty acid is higher in the original oil from which each soap was made.

Examination of the Ion-Pair Effect During the Dissociation of Tris-(1,10-phenanthroline)-iron(II) Ion in Solvents of Varied Composition. Theron W. Ng-A-Qui and Colleen M. Taylor, Department of Chemistry and Physics, Virginia State University, Petersburg VA 23806

The dissociation reaction of tris-(1-10-Phenanthroline)-iron(II) ion, $[\text{Fe}(\text{phen})_3]^{2+}$, in the presence of competitor ion has been well studied and is a classic example of the effect of solvent composition on kinetic behavior. The kinetic behavior is unusual in that the rate of dissociation increases dramatically as methanol content is increased relative to the aqueous component only to decrease precipitously as the methanol solvent component reaches approximately eighty percent. The behavior is thought to be an ion pairing effect. The intent of this research is to determine the roll of various solvents in the ion-pair effect. This will be accomplished by a systematic change in solvent compositions not previously examined. Possible alterations of this effect with more complex solvents systems may lead to an increased understanding of the ion pair effect.

Oxygen Consumption Studies of Phenoxy Radicals of Desacetylbisacodyl, Sean P. Platt and H. J. Sipe, Jr., Department of Chemistry, Hampden-Sydney College, Hampden-Sydney, VA 23943

Bisacodyl is currently used as the active ingredient in over-the-counter laxatives. When this drug hydrolyzes in the stomach, it forms desacetylbisacodyl (DABC). The chemical structure of DABC closely resembles that of phenolphthalein, a chemical once used in laxatives. Data from animal studies in a report from the National Toxicity Program found that phenolphthalein was a carcinogen and was thus removed from use in laxatives. Electron Spin Resonance (ESR) Spectroscopy and oxygen consumption experiments were performed using phenolphthalein to show the production of phenoxy radicals. ESR experiments performed using DABC produced results similar to those found with phenolphthalein. Using an *in vitro* system, oxygen consumption experiments were performed in the present study to compare results using DABC to those using phenolphthalein. The system used to create the phenoxy radicals included DABC, hydrogen peroxide, glutathione or NADH, and lactoperoxidase in a Tris-HCl buffer. The lactoperoxidase was used to initiate the reaction causing the production of the phenoxy free radicals that are discharged using glutathione and form subsequent radicals. These secondary radicals react with dissolved oxygen leading eventually to the production of superoxide radicals, which causes the consumption of oxygen in an *in vitro* system. Oxygen consumption ceased when superoxide dismutase, DMPO, ascorbate, or catalase was included in the complete system indicating that phenoxy radical production was suppressed by these additives.

Electrochemical Performance of a Nanocomposite Electrode Fabricated by Layer-by-Layer Assembly of Pt Nanoparticles, Glucose Oxidase and Poly(dipyrrole) as a Glucose Biosensor. Melvin Rajaratnam and Ca Diep, Department of Chemistry, Shenandoah University, Winchester VA 22601.

The study develops an electrochemical glucose sensor with enhanced sensitivity, selectivity, and stability by exploiting: 1) the electrocatalytic activity of platinum nanoparticles (Pt NPs) on glucose oxidation; and 2) the inherent selectivity of glucose oxidase (GOx). Poly(dipyrrole) is employed to enhance the stability and selectivity of the sensor. The electrode model can be a surrogate for other biosensors as well as biofuel cells. A bare Au electrode is modified with a self-assembled monolayer of cystamine. Multilayer films are grown by alternately dipping the SAM-modified Au electrode into an aqueous Pt NP solution and a solution containing GOx and dipyrrole. The outermost layer is GOx and dipyrrole. Dipyrrole is electropolymerized. The growth of each of the Pt NPs/(GOx + dipyrrole) bilayers is followed quantitatively using the UV-visible spectro-photometer. The selectivity, sensitivity, and lifetime of the glucose sensor are investigated. The study also aims to determine whether glucose is oxidized electrochemically at the Pt NPs only or also at the GOx.

Formation of Oriented Carbon Nanotube Ribbons. Melissa Rich and Jill Venton, Department of Chemistry, University of Virginia, Charlottesville VA 22904

Previous research has shown that oriented carbon fibers can be formed in a rotating solution of 5% polyvinyl. Current research is focused on creating ribbons small and flexible enough to be used in the construction of carbon electrodes. The carbon nanotube ribbons may give better sensitivity and electron kinetics than carbon fibers when sensing neurotransmitters *in vivo* using fast scan voltametry. The most recent experiments have attempted to determine the optimum speed of injection for the carbon nanotube solution and the best method for removing the fibers from solution.

Use of a Quartz Crystal Microbalance to Monitor the Interactions of Multinuclear Platinum Complexes to Biologically Relevant Molecules. Christopher M. Shuford¹, Melissa C. Rhoten¹, John B. Mangrum², and Nicholas P. Farrell². ¹Department of Chemistry & Physics, Longwood University, Farmville, Virginia 23909, ²Department of Chemistry, Virginia Commonwealth University, Richmond, Virginia 23284

A series of non-covalent polynuclear platinum complexes, AH-59, AH-57 and AH-44 are being investigated for their potential use as anticancer agents. These complexes represent analogs of BBR 3464, a trinuclear platinum compound used in phase II clinical trials. The non-covalent interactions between the potential anticancer agents and electrode-immobilized DNA were monitored using a quartz crystal microbalance (QCM). Initial results show reversible interaction of the complexes with surface-immobilized DNA at low concentrations (ca. 50 μ M and 25 M), with less intense interaction occurring at lower concentrations. The interaction of these complexes with HSA is also important as binding of drugs to HSA found in serum reduces the free concentration of the drug and thereby alters the physiological activity. Preliminary QCM data investigating the interaction of AH-59, AH-57, and AH-44 with electrode-immobilized HSA are discussed.

Molecular Dynamics Analysis of Potential Inhibitors of HIV-1 Protease. Gregory Springsted and Carol Parish, Department of Chemistry, University of Richmond, Richmond, VA 23173

C60 fullerene has been shown to inhibit the HIV-1 protease through interactions with its active site. However, the low solubility of Buckminster fullerene in water limits the ability of C60 to act as viable protease inhibitors in the human body. This work utilizes the OPLS2005 force field along with the GBSA solvent model for water to perform molecular dynamics simulations to model the energetics and interactions of potential HIV-1 protease inhibitors that are similar to C60 fullerene, but more soluble in water. In addition, the program Maestro was utilized to determine and compare the physical characteristics, such as surface area, of C60 and the potential inhibitors.

Inhibition of Alcohol Dehydrogenase by 4-Methylpyrazole. Amanda Stefano, Dr. Vladimir Garkov and Dr. Lundy Pentz, Department of Chemistry, Mary Baldwin College, Staunton VA 24401

Poisoning by methanol and ethylene glycol are common problems faced by hospital personnel. Current treatments are inadequate and sometimes dangerous. Development of a new drug to safely and effectively treat poisoning could be a lifesaving advance. 4 methylpyrazole is a new drug, which was approved to treat methanol and ethylene glycol poisoning by inhibition of the enzyme alcohol dehydrogenase. Enzyme assays were performed using ethanol, methanol, and ethylene glycol as substrates as uninhibited reactions, as well as in the presence of trifluoroethanol, a known ADH inhibitor, and in the presence of 4 methylpyrazole. It was determined that 4 methylpyrazole is an inhibitor of ADH.

Spectrophotometric and Thermodynamic Study of Cucurbituril 7-Methyl Viologen Inclusion Behavior. Patricia Grace and Karl Zachary, Mary Baldwin College, Staunton VA 24401

Cucurbituril 7 inclusion behavior is of interest for its potential use in industry and medicine. This series of experiments focused on the effect of host-guest complexation between Cucurbituril 7 (CB7) and Methyl Viologen (MV^{2+}) on the UV-Vis absorbance spectra of Methyl Viologen. The study showed that CB7- MV^{2+} complexation does indeed occur and that the absorbance of the conjugated Methyl Viologen system is decreased upon complexation with CB7. Spectra at various temperatures were analyzed to determine the thermodynamic stability of the complex formation.

CAN YOU IDENTIFY THIS PERSON?



The photograph is from 1972 when the subject received the Distinguished Service Award in Science Teaching from the Virginia Section. At the time, he was teaching chemistry at Waynesboro High School. Born in Jonesville, Lee County, Virginia, he graduated from Emory and Henry College in 1936 with a B.S. in Chemistry. He served in the U.S. Army, retiring in 1962 as Chief Warrant Officer after 25 years of service. His principal at Waynesboro High School described him as "a most outstanding teacher who has a real concern for young people and their development of a valid life's philosophy as well as their development of a basic background in Chemistry."

Jim York was the "mystery person" shown in the October Bulletin. Jim served as Chair of the Virginia Section in 1968 and received the Distinguished Service Award in 1973.



THE BULLETIN

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