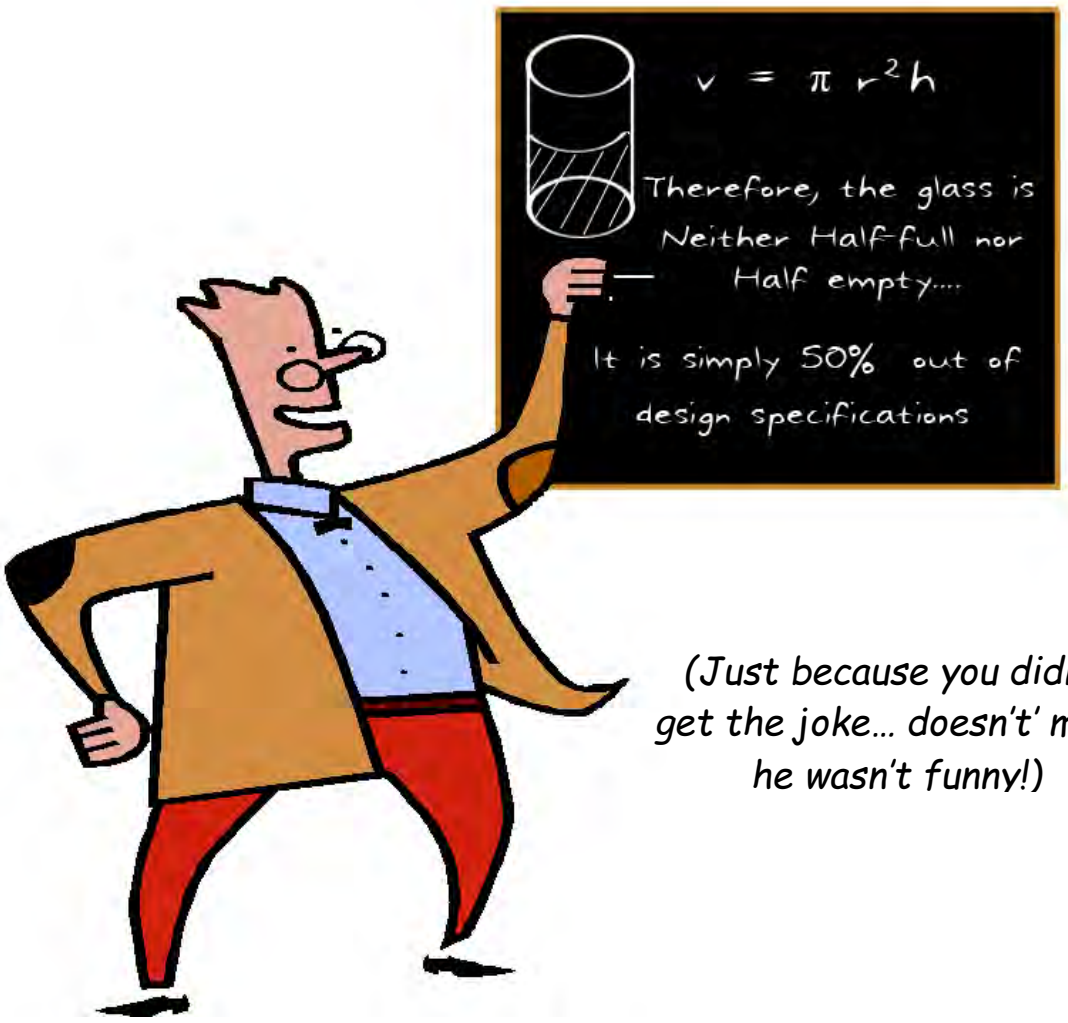
The University of Maine
College of Engineering

Is proud to Present

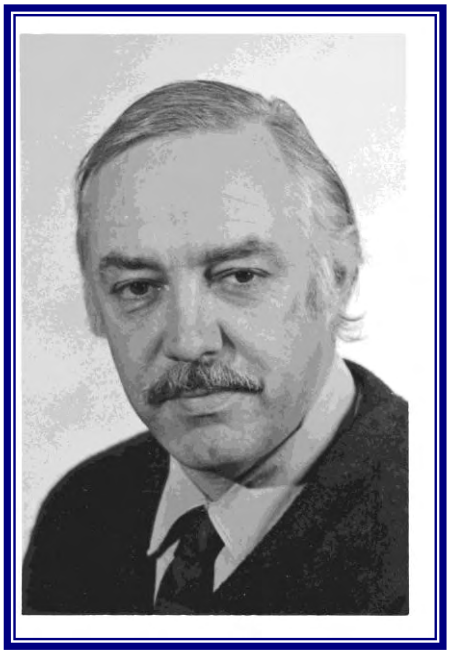
No Jokes Required



(Just because you didn't get the joke… doesn't' mean he wasn't funny!)

A retrospective of the remarkable career and personal adventures of the master educator and engineer extraordinaire:

PROFESSOR JOHN LYMAN



Just the Facts About

John Lyman

Personal:

Born: Dec 12, 1942 in Middletown Connecticut,
Married, 4 children.

Education:

1946 B.N.S. Naval Science, Tufts College
1947 B.S. Mechanical Engineering, Tufts College

Work Experience:

1943-1946 US Navy
1947-1948 Carnegie Illinois Steel Corp.
1948-1992 UMaine Department of Mechanical Engineering

Areas of Expertise

Metallurgy
Thermodynamics
Materials Engineering

Professional accomplishments

- In his fourty-four years at UMaine, John held every position in mechanical engineering from instructor to two stints as Department Chair (1972-1980 &1985-1989.)
- Although Prof. Lyman was never awarded an advanced degree, his research was published several times in the ASME Journal of Engineering Materials and Technology
- In 1985, Prof. Lyman was awarded patent for "a method of high carbon steel microcracking control during hardening"

Welcome to the Party!

Six years ago, UMaine Engineering began what has become one of our most enjoyable traditions. Every year during Homecoming weekend, we celebrate the career of a distinguished emeritus faculty member.

2000 – Mechanical Engineering -*Dick Hill Pajama Party*
2001 – Electrical Engineering - *Showtime with Mac Libbey*
2002 – Civil Engineering - *George Greenwood's Cowboy Roadshow*
2003 – Chemical engineering -*Bill Ceckler; Confessions of a Chemical Engineering Outdoorsman*
2004 – Engineering Physics – *Jerry Harmon, the Physics of Subjective Reality*

This year we return to Mechanical Engineering by adding Prof. John Lyman to the ranks of our honorees. "*No Jokes Required*" was chosen as the theme for this year's event because of our experiences while collecting stories for this book.

UMaine Engineering has always viewed our annual emeritus luncheons as purely fun events that celebrate the numerous faculty members that have given our programs the life and character that is so fondly remembered by our alumni. With this in mind, every year when we send invitations to our alumni, we request "humorous" stories about our honoree.

Responses to Professor Lyman's invitations started arriving almost immediately. All of the contributions were wonderful stories about the John's teaching style and his impact on the success of his students. However, a significant number of the contributors felt compelled to add the explanation that their stories "weren't really humorous... because that just wasn't John's style." Although it was obvious that Prof. Lyman was extremely well regarded by generations of students, he wasn't know for being "funny" in the comedic sense of the word.

Fair enough... ***No jokes required.***

Engineering doesn't usually require a punch line. Or perhaps the humor to be found in engineering lends itself to more subtle forms. Whatever the case, as you read the stories in this book, you will see just how great a role John played as an instructor, mentor and friend. I suspect you will even see a great deal of humor, if not any actual jokes.

Every time I visit our alumni, I experience the true measure of John Lyman's years spent teaching Mechanical Engineering at UMaine. His students have become CEOs of major corporations, entrepreneurs and university faculty members. All of them credit their time at UMaine as a major factor in their success. Most importantly, all of our alumni remember their professors as a guiding influence that inspired them to reach their full potential in life.

We sincerely thank you for helping us to honor John, and hope you enjoy the party!

Larryl Matthews
Dean of Engineering

John Lyman Stories

You arrived on the scene at the College of Engineering at UMaine a year before I graduated from Deer Isle High School. It was my good fortune that you did so, as I entered Maine in 1949, intent on earning a degree in Mechanical Engineering.

I have many fond memories of the hours spent in Boardman and Crosby Halls under the guidance of Harry Watson's team, Messrs. Faneuf, Hill, Lyman, Prageman, Sparrow, Sullivan and Watson. As I recall, our Mechanical Engineering class numbered 26, and as a result, we benefited greatly from much personal attention and mentoring from the faculty. This was an experience that I would never forget that was of benefit to me for years to come.

Our paths crossed again when you were the Chair of Mechanical Engineering at UMaine and I was in charge of engineering for GE Aircraft Engines in Lynn, MA. Together, we managed to dispatch Gerry Sonder, a first class engine designer from Lynn, to join your staff for a period of time as a guest instructor and lecturer. I think that this was a unique achievement and a memorable experience for you, me, Gerry and your students.

I am delighted to join your former students, collegues and friends in a tribute to your significant and lasting contributions to Mechanical Engineering, your students and the University of Maine.

Frank Pickering
UMaine Class of 1953

I began College at UMO in the fall of 1947 in the ME Department. I never had John as a teacher, but I did benefit from his knowledge later. I returned to the University in 1958 as an instructor in ME. One of the courses I taught was metallurgy, materials of engineering. I was new at teaching, and metallurgy was a new subject to me. When I had any questions or needed suggestions on how to present a difficult concept to my students, I would go to John. He was always glad to help me. He was my mentor.

Thank you John!

Henry L. Laskey
UMaine Class of 1951

I may be the only person to have had John Lyman in class when he was an undergraduate student and then to be a faculty colleague of his for six years! John and I both attended Tufts College during WW II, he in the Naval ROTC and I in the Navy V-12 part of the program. The "powers that be" left out some engineering course from the ROTC men and sent them out with commissions as Ensigns after 7 semesters, while we V-12ers got the full degree course, then Midshipman School, then off to duty stations. I was out and commenced teaching in the Engineering Drawing Department of Tufts in the Fall of 1946; one of the courses I was assigned was a Sophomore course in Mechanisms, all graphical methods, and over half of the 30 or so people in the class were former college classmates of mine who had been in the ROTC, including John, and two from my High School class. What a chance for my "friends" to give me a hard time as a totally green instructor! There was none of that, at all! Then the next time I encountered John was in the fall of 1948; I had moved from Tufts to Maine, working for Harry Watson in the ME Department, along with a large bunch of new faculty to handle the veteran "bulge" and, who should be sharing an office in the old East Annex with me but John Lyman! I forget if we were in that old building for one year or two before the "New Engineering Building" was built, which I guess is now an old building, but we hen had separate offices until I left in 1954 to get engineering experience with Eastman Kodak Co. We have kept in touch with visits "back home" every few years and Christmas messages every year.

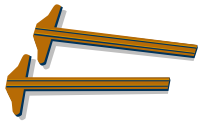
I hope this is useful, although not "humorous," as we were much too busy for humor, teaching an 18 credit load, taking courses towards an MS, and being husbands and fathers of little kids.

Arthur S. Weaver
UMaine Class of 1954 (G)

After 54 years since having John as an instructor, I don't have much in the way of memories from that exposure. I do remember using some of the knowledge he had imparted to us during my career. As a young engineer at Beloit Corp I was involved in a study to determine why our welding of stainless steel was disappearing practically overnight in the Southern Kraft paper and board mills. As a result of that study, the industry went to shielded arc welding of SS which at the time was a relatively new concept.

As I remember, John's delivery of lectures was rather "dry" in those early years of his career and as a result there were often many drooping eyelids in the early morning classes. He must have been able to transmit a lot of that information by ESP.

Howard K Ainsworth
UMaine Class of 1954



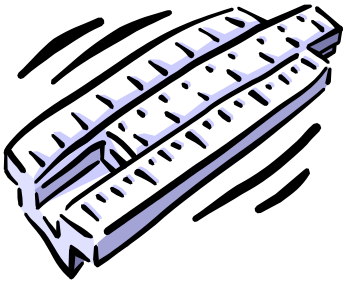
As an ME Senior in 1979 sitting in Prof. Lyman's vibrations class, he would often give in to our "Senioritis" attitude and digress from the subject at hand.

One of his "pearls of wisdom" was not lost on me and I have passed it on to other engineering students.

In whatever field of engineering that you pursue, find an area of that discipline that you enjoy and become an expert in that field. You will be rewarded well.

It has worked for me and many others.

Jeff Welch, P.E.
UMaine Class of 1976 & 1979



Prof. Lyman was always ready to give us a challenge. I particularly remember a metallurgy lab where he gave us a "mystery metal". We had to figure out what it was, with all its alloy components. We had the full run of the lab trying to figure it out, and we learned a lot about solving metallurgical problems.

Prof. Lyman was also concerned about the whole person, including our social skills. Once he invited the whole class to his house for dinner in the evening. As we stood around afterward, one of us asked a question uncharacteristic of the male dominated engineering fraternity: "Whatta we gonna wear???" After some thought, and chagrin at some of our limited wardrobes, someone else thought of: "Sweater and a tie!!!" It worked for us. Some hasty loan arrangements were made, and a few days later we appeared at Prof. Lyman's house in our uniforms. He not only noticed but complemented us on our communicativity and good taste. We had a wonderful evening.

Tom Campbell
UMaine Class of 1973

It is with great personal pleasure and memories that we convey to your our best wishes for the contributions and support to the University of Maine and the Mechanical Engineering Department through the many years!

I'm reaching 80 years on October 4th 2005 and recalling my acceptance to attend the University of Maine as a Navy Veteran at age 21 in 1947 and the three years to my graduation in 1951. The support and encouragement of the Mechanical Engineering staff was paramount to a successful career and family.

The one thing most of us never realized until we arrived at UMaine was "the speed of passing time". The greatest reward is the enjoyment of our family and those who influenced our lives

Charles R. McKay
UMaine Class of 1951

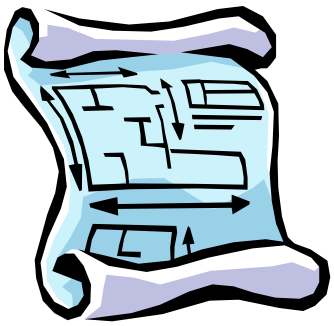
During my time at Orono, I lived downtown and would walk to and from campus. Since Professor Lyman often walked to campus himself, occasionally I would wind up walking with him (as well as Professor Grant sometimes). Seeing these two gentlemen walking to work had enough of an impact on me that to this day I try to do so as often as practical (or bicycle a la Professor Hill).

One late afternoon Professor Lyman sped past me on the walk home. I picked up my pace a bit and we began chatting. The subject turned to television when he asked if I knew anything about them. Apparently he was going to be entertaining guests at his home for a period of time and thought it might be a good idea to get one for their stay. Evidently he did not own one! Although I did not own one either (poor college student), I found it remarkable that someone in his position did not have one. Like the walking, it made a big impression on me. I have never purchased a set, and currently the television in my home (which was a gift in 2001 from my brother and sisters who thought it quite odd not to have one) is rarely used and has never been hooked up to the cable.

Another story – My one and only class with Professor Lyman was "Materials". This class met on Tuesdays and Thursdays. On the first day of class Professor Lyman diligently took roll call, making sure to look at everyone as they responded. Near the end of class he announced a quiz, had us answer a question or two on a piece of notebook paper, and then hand it in to him. The second day, Professor Lyman was quietly handing back the graded quizzes as people walked into the room before class started. He handed mine back as I walked in and I did not think anything of it. As I waited for class to begin it became clear that he had remembered most everyone from that first roll call. My immediate thought was that this was someone you do not want fool around with.

Professor Lyman, as well as several other ME professors, have had a positive impact on me on how I go about my daily business.

John H. Bannen
UMaine Class of 1988



My favorite story is about my husband, Dan Morency. We were both ME students of Prof. Lyman 1979-1981. We had great professors...Lyman, Clifford, Grant, Schmidt, Hill, and James? who memorized the steam tables! We had a great ME program!

Professor Lyman was in the process of handing back a single page corrected test in a ME class (fluid dynamics or thermo, can't remember). When Dan received his test back, he stood up and in shock, said to Professor Lyman, who had moved on to another student, "I got a hundred on this test and you took off 8 points for grammar?!!!". Dan was so mad that he ripped up the test and ate it piece by piece. Professor Lyman remained calm and continued to pass back tests to other students while explaining to Mr. Morency the importance of proper grammar and communication skills in engineering. I think we were all shocked that Dan ate his test in front of Professor Lyman. Dan went on to acquire the reputation of being the "Tasmanian Devil" at his first engineering job at Fairchild. He still, to this day, refuses to let a machine beat him. This personality trait has helped him manage his disability...there's not a problem that he won't tackle and solve.

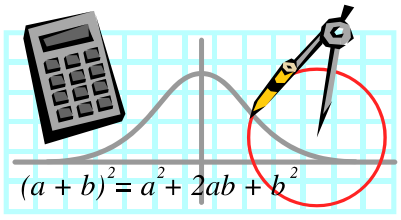
Karen Tai Morency
UMaine Class of 1981

I was an engineering student in Professor Lyman's Thermodynamics class sometime around 1982. It was winter in Orono, and Professor Lyman, after taking off his overcoat and hat, immediately immersed himself into the lesson plan and began writing on the board.

With his back to us, we could see atop his head a large, red spot bleeding through his white hair – obviously blood. After a few furtive glances around the room (should we interrupt him and say anything?), someone finally spoke up: "Excuse me Professor, but do you realize your head is bleeding?"

Professor Lyman, now turning with a puzzled look, felt the top of his head, paused to examine his wet finger, and then replied matter of factly "Oh yes, I did trip and fall on the ice on the way in this morning. I feel kind of funny, too." And back he went into the lesson, barely skipping a beat. Never a word more was mentioned.

Mike Leighton
UMaine Class of 1985



In the late 1940s Crosby Hall had an associated 200 horsepower coal-fired boiler. An annual routine was a 24-hour test. Students were divided into shifts and each shift had rotating tasks of operating the Orsat, weighing the coal (nearly 700 pounds per hour), collecting the condensate, measuring stack temperature, etc. A ramp on both sides of a set of scales was provided to accommodate measuring the amount of coal in each wheel-barrow load. Students would shovel coal into the wheelbarrows, run it up the ramp onto the scales, make a weight measurement, run the wheelbarrow down the other side, and dump the load on the floor for subsequent firing into the boiler.

A large chart was used to log all the data including calculations of efficiency. We old hands had been through this several times and knew what to expect. On one particular year, the efficiency seemed to be running in the high sixty percent range instead in the expected middle seventy percent range. The staff wandered from station to station looking at Orsat data, stack temperatures, etc. Everything seemed OK. Then, I am sure it was John, watched the coal weighing operation and announced: "They are not subtracting the weight of the wheelbarrow." Once that adjustment was made, the data came back into line.

I think the younger generation of instructors should know: that generation of students, with subsequent master's degrees, are the cadre that put the man on the moon.

Dick Hill
Professor Emeritus of Mechanical Engineering

Our fond Memories of John Lyman, his wife, "Wowie" and family began not as students, but as 1st year (1948) instructors in the Mechanical Engineering Department at UMaine. We became very good friends and our similar interests led to many nights of bridge (inspired by a quart of beer or bottle of port wine), snowshoeing with candles in the Forest Avenue woods, ice skating by a night bonfire on Pushaw stream, moon light canoe trips and fishing at Mud Pond. It became a part of our yearly experiences. Our families were growing up together and we became godparents to their daughter Mary. We left this area in the 60's and recently returned to Orono to renew friendships many years later.

Jay Calkins
UMaine Class of 1948
Betty Calkins
UMaine Class of 1950

I thoroughly enjoyed my four years at Orono from 1978-1982. I remember taking Professor Lyman's class on materials and learning about "face centered cubic" and "hexagonal close-packed" crystal structures, all very abstract at the time. I also remember Prof. Lyman encouraging me to attend graduate school over a pint of beer at the Oronoka. Professor and Lyman and Grant had organized a senior night out at the Oronoka. At the time, I was ready to move on to a career at Eastman Kodak and lead the good life. After five years at Kodak, I heeded Prof. Lyman's advice and returned to graduate school at Rensselaer Polytechnic Institute where I earned my Ph.D. in 1992. I am now a professor of Aerospace and Mechanical Engineering at the University of Notre Dame. And interestingly enough, I am now involved in designing new materials for use as hard tissue replacement in bone and biomimetic materials for application in aerospace structures. I should have paid more attention in Prof. Lyman's class. I return to Maine each summer and had the good fortune of running into Prof. Lyman in Millbridge during one of my visits. One measure of how times have changed is that in pulling my old materials book off the shelve, I noted its cost $29., a real bargain in today's world where comparable texts regularly exceed $150.

John E. Renaud, Ph.D., P.E.
UMaine Class of 1982

I recieved notice of the luncheon being held for Prof. Lyman and was extremely pleased that John would be honored in this way. Over the years Professor Lyman has provided great service to the University of Maine and the Mechanical Engineering Dept. He has assisted hundreds of young students in achieving their goals and obtaining a degree in mechanical engineering.

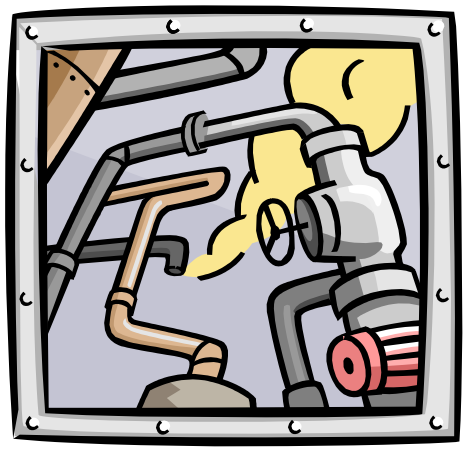
My story is not humorous but does show Prof. Lyman's commitment to his students:

I was a "nontraditional" student in 1974 when I first met Prof. Lyman, he was teaching a night course in metals which I attended. I had worked with the admissions office to get admitted to the school of engineering after taking a year of courses primarily to get my math skills up UM standards. I enjoyed the metals course that John taught and we had discussed the process I was going through to get into the engineering department. John told me if I ever had any problems with the admissions office to come see him. Well as it turned out the last math course I needed to take finished very late in August. Upon completion of the course I went to the admissions office to enroll in

the ME class. Much to my dismay they informed me to was to late to enroll and offered no alternatives to get me into the program. I left the office in shock but remembered what John had said. I went directly to his office, told him the story and he made a call to the admin. office while I sat there and got me admitted as a special student that day.

This is a fine example of the care and concern Professor Lyman has always had for his students. Truly, a great human being.

Curt Bartram, P.E.
UMaine Class of 1979



John taught several of my classes, but I remember him particularly teaching Materials of Engineering. He would patiently be explaining alloy mixtures while simultaneously constructing Eutectic Diagrams that were truly works of art. John used colored chalk and drew the diagrams with great precision that exceeded the quality of any in our text books.

He gave me a wonderful foundation of engineering skills that I used throughout my career as a research engineer with Eastman Kodak. Thanks, John.

Richard Pomeroy
UMaine Class of 1957

I graduated from UMaine in the class of 1968, BSME. Because of the instruction of Prof Lyman, I enjoyed thermodynamics and continued in to this day the field of power generation and developing thermal cycles (heat balance diagrams) for various power plants and clients.

I remember for our first thermo class we came into class took a chair and proceeded to look over Prof Lyman. Then he took attendance. He had his role book and class roster. He'd called out our name, we said "here," and he would come to our desk, look, no study us, look at his role book, and look back at us, then go on to the next student. The next day, it was the same thing, study look at book, look back, the third class the same thing. On the fourth class, he just look up (over his glasses?) and announced out name, Mr. Scott! From then on he knew who we were, Mr. Scott, Miss Smith, etc. Our senior year, the first day we'd saw him, it was "Hi, Bill" and we were called by our first name from then onward.

Second thought, learning how to read the Keenan and Keys Mollier diagrams. Prof Lyman went over the basics, two independent variables pressure, temperature, moisture, etc., to determine a third property of steam. We took out

our Mollier diagrams and made an attempt to manipulate the beast. Then here comes Prof Lyman, he looks at us and out diagrams, takes out his magnifying glass and looks up the appropriate state point. At that point, we the class, who are Lyman groupies by this time go gown to the Book Store and purchase our own magnifying glass to assist our quite young eyes in looking up the state points. I still have mine which I affectionately call my "Poppa John." I don't use it to look up state points on the Mollier Diagram any more as there are computer programs that do this, but as I get older I do use it. Just wondering, does Prof Lyman still have his light blue (I think) VW micro bus?

W. D. "Bill" Scott, PE
UMaine Class of 1968

I remember working on the Terrell house project my senior year with Professor Lyman. During this time he was interviewed on television regarding the use of nuclear power. Professor Lyman challenged (in a very matter of fact tone) any of the coal burning electric power plant advocates to a duel where they each would eat the by product of their preferred fuel generating 100kW (this number may not be correct) of power. He then stated that he would have eaten desert and would be long gone before they dropped dead from the poisoning effects of eating coal ash.

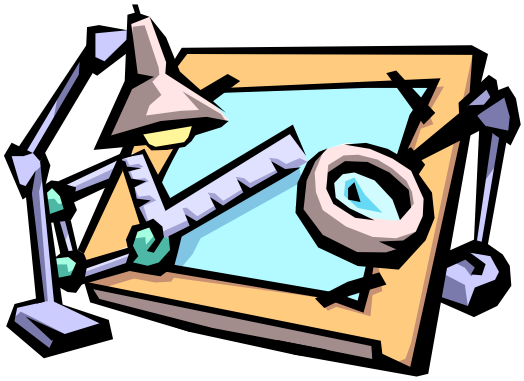
Kevin Verrier
UMaine Class of 1987

It is quite possible that you will not remember me. I was one of your students in the Class of 1956, a very long time ago now. I took your "Materials" course and remember learning much of value for my future career. It must have been about 1954 that we saw each other in classes.

I also got an MS in Pulp & Paper Technology from U. Maine in 1957 and thereafter joined Scott Paper Co. for a 35 year career. Corrosion is a big issue in our industry so understanding materials of construction issues was very important for me. I practiced mechanical engineering for about 10 years and then moved into manufacturing management. My education at U. Maine certainly served me well over all of the years of my career which included another 11 successful years of running my own consulting business following retirement from Scott.

I add my congratulations to you for your stellar career with the University of Maine! I wish you continued pleasure and good health as you go forward in life.

R. Bruce Arnold
UMaine Class of1956



Reminiscences of Professor John R. Lyman

In response to the request for reminiscences from students, colleagues and friends, it is possible that this comes from one of only a few who fall into all three categories.

Student.

My association with John as a student is the least profound of the three categories. John was my instructor for only one course, Me 21, Materials of Engineering. Unfortunately, this was the only course I took twice, having failed it on the first attempt. The recollection that stands out during the first encounter was that my mode of transportation during the fall of 1951 was by crutches, having sustained a broken ankle in a football scrimmage just prior to the start of classes. My frustration and somewhat negative attitude toward Me 21 (the first time) was that John always "took it to the bell" and sometimes beyond. As a two hour course, it met twice a week, as did ROTC. My problem was that these two courses were held the same day during consecutive hours, the latter meeting in the third floor of the Folger Library. Because the tests presented by the military program were not especially challenging, they devised a method of making sure that not everyone got an "A." This consisted of a demerit system. For every two times that one was tardy, it constituted an absence which was accompanied by a demerit. Demerits were in turn accumulated and used to decrease ones grade. On those days when John rambled on "beyond the bell," and even if he didn't, it was a next to impossible task to make it from the second floor of Boardman Hall to the third floor of the library in ten minutes *using crutches*. My attitude toward John and Me 21 was negatively impacted, as was my grade in ROTC.

Me 21 (the second time) was a different experience for me. The presentation and text was changed, and I was challenged by an overload of courses, a job as proctor in a freshman dorm, and the need to utilize every minute of my day to compete in football.

Colleague.

John became one of my "coaches" as I joined the Mechanical Engineering faculty, always ready to offer advice and help me through an explanation with which I was having trouble. There were times when, due to my procrastination, I would find myself in a predicament with no obvious solution, time bearing down, and having to ask for assistance. John would always have the time to help me and never made me feel

embarrassed for having asked, what to him must have been, very rudimentary questions. It was during these early years as a colleague that we also became good friends.

Friend.

There were several events on which we sometimes reflect. Having both built our own homes, we both had the "Nike" attitude that when something needed fixing "just do it." On one occasion, I had a sewer backup problem which I had assumed was at the connection of my house drain to the six or eight inch sewer main located in the middle of the street. I had engaged a back hoe to do the major excavation. Not knowing the exact location of the interconnection, there was considerable trial and error to find it. It involved a lot of hand work, it was well after dark, and I was getting very tired. I called John to help me out. The thing that we both remember well was that it may have been approaching midnight when a car drove up, and a man got out to observe the abyss into which one might well have driven if not paying attention. The driver was the Town Manager and implied that perhaps I should have gotten a permit or at least notified someone that we planned to tear up a town street and suggested that some form of warning barricades would be in order.

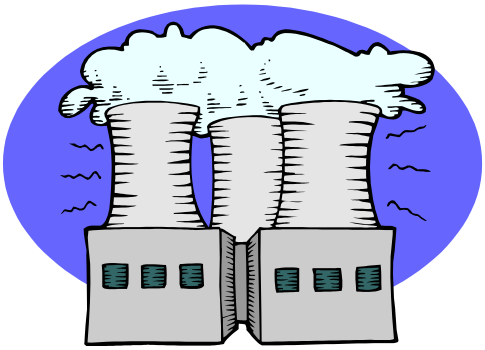
Another category of relationship in addition to *student, colleague and friend* could be included in notes of reminiscences, that of *business partner.* We both worked very hard together in the summer of 1960 as we purchased a building lot on Westwood Drive and completed construction of a home which was sold that fall.

Orono remembrances were the full moon toboggan and ice skating parties with the Millers and other friends, and various outings, but the significant bind of our friendship came as a result of John's expression of interest in purchasing a small portion of shore property which I had acquired in Steuben in 1957-58. As an out-of-doors, camping type of family, I felt that the privacy and inaccessibility which our property provided would be something they would enjoy. In 1959, the Lymans purchased a small shore lot from us and with few exceptions spent at least a month every summer camping out and living very primitively until the 1990s. During many of the earlier years, our monthly vacations overlapped, and our children and their children also became good friends. John can tell you of his experiences of almost being run down by a Clark owned Morgan horse chased by a German Shepherd dog running unchecked through the wilderness shores of Steuben.

With retirement came acquisition of more land by the Lymans and construction of a wonderful summer home which they now enjoy for nearly half of each year. This has allowed us to continue our friendship as our closest "next door neighbors" (about a thousand feet away) as we try to

spend four months of our retirement years there as well. I would be remiss if I failed to add that our wives feel equally strong with respect to our friendship with our summer neighbors.

Llewellyn (Lew) Clark
UMaine Class of 1954, '55 (G), '56 (G)



It must have been Spring of 1967 or thereabouts. Professor John R. Lyman entered the Boardman Hall classroom at his usual deliberate pace, softly placed his thermodynamics text on the desk, and continued the few strides over to the window overlooking the mall. He peered intently at nothing in particular for what must have been a full minute, then moved back to the desk. He met our expectant gazes for a bit, then returned to his post at the window and looked at the sky for another minute, slowly stroking his moustache before saying: "I read this morning about a proposed coal-fired power plant that's to be constructed just west of Pittsburgh. In order to dissipate the particulate matter from the plant, they figure they've got to erect a six hundred foot stack."

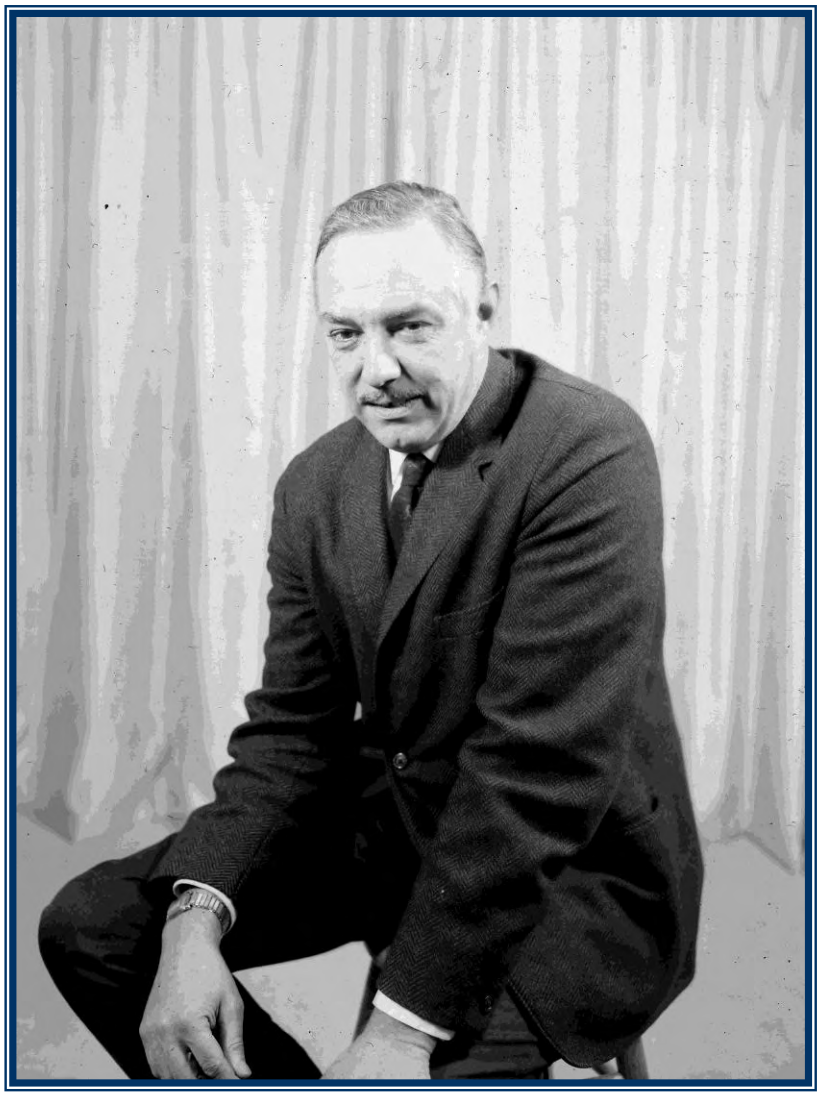
He walked back to the desk, looked again at each of us, and said with just the slightest hint of despair in his voice: "You know, they're going to do it."

He said nothing else about the matter, and let it sink in for only a moment before beginning his lecture.

I didn't consider this a particularly epiphanous moment at the time, but it sure stuck with me. Now, as I contemplate what has been a satisfying career in the environmental engineering field, I know precisely whom I have to thank for the initial push in that direction.

I wish you all the best, Professor Lyman.

Rodney L. Hanscom



Thank you John!

For forty-one years you taught generations of UMaine mechanical engineers to the highest standards of the profession. Your service and dedication to your students helped establish the UMaine tradition of excellence in engineering that will continue to guide and inspire us for many years to come.