

THE MELLOW MET NEWSLETTER

No. 23 — January 2000

An Extraction of the News for
Metallurgical Engineering
at the University of Utah



Professional Society Meetings

Happy New Year! We hope to see you at the professional societies' annual meetings, which will be held at the following locations this year.

TMS Annual Meeting — March 12–16, 2000, Nashville,
Tennessee

SME Annual Meeting — February 28–March 1, 2000,
Salt Palace Convention Center, Salt Lake City, Utah

No alumni mixer will be held at the TMS Meeting this year.

At the SME Meeting in Salt Lake, the alumni will meet as part of the College of Mines and Earth Sciences Alumni Reception scheduled for Tuesday February 29, 2000 from 5 to 7 p.m. in Salon D, Marriott Hotel.

A Message from Dr. R. Peter King, Department Chairman

Dear friends:

Our annual Mellow Met Newsletter is one of the few channels of communication that we maintain regularly with our alumni. It is a pleasure to send you all greetings from the Department and to renew this important annual link. Some of you will know that I assumed the Chairmanship of the Department in July of last year after an eventful year with Raj Rajamani at the helm as interim Chair. It is a pleasure to record our thanks to Raj for piloting the Department through the first of what appear to be several years of reorganization.

Raj initiated a major effort to increase recruitment of both undergraduate and graduate students, and this will be a focus of our attention for the next several years. Enrollments in the Department have declined steadily for a number of years now and we must continue our attempts to encourage young people to regard the metallurgical industry as an exciting career opportunity. Media coverage and some dramatic advances in medical, biological and information technology seem to have diverted the attention of young people away from the more traditional, but nonetheless enormously important, production and manufacturing industries, which are the primary beneficiaries of our graduates.

I would like to take this opportunity to encourage each of you to take every opportunity to tell young people about the profession and to encourage them to consider all of their options before finally deciding which course is their best choice at college. The availability of good scholarships in Metallurgical Engineering is still one of the outstanding features of our Department that catches the attention of young people, and I would encourage all alumni to consider supporting the Department scholarship fund to ensure that succeeding generations of young people do have the opportunity to begin their professional careers in our Department with some degree of meaningful financial support. To all the many individuals and corporations who have supported our scholarship funds during the past year, I express our appreciation. Many young people will benefit from your generosity.

December 1999 marked the retirement of Professor Gerry Byrne as Ivor Thomas Professor of Metallurgical Engineering.

Gerry served this Department with great distinction for 20 years and his retirement has left a significant gap in our Faculty. Gerry has accepted an appointment as Professor Emeritus so we will continue to maintain our contact with him and he will be present in the Department from time to time. He joins our group of active and extremely distinguished Emeritus Professors, Milt Wadsworth, Charlie Pitt and Ferron Olson, who still maintain a visible and important presence in the Department and to whom I, as a fresh Chairman, am pleased to be able to turn to for advice and guidance.

Tertiary education in the United States, and indeed throughout the world, is moving very firmly into the information age, and these developments are having a significant impact on our teaching and educational activities, particularly among our wonderfully energetic young faculty. The almost universal availability of the internet and its ability to transmit enormous amounts of information in every conceivable medium is probably the most dramatic innovation in education that has occurred in many years.

The turn of the century seems to have focused attention of educators throughout the world on this remarkable and enormously useful tool. Its possibilities have been enthusiastically embraced by faculty in the Department, and the University is currently providing an excellent mechanism for the delivery of educational materials via the internet using a good WebCT server. WebCT is one of the two popular internet educational systems that have come into prominence throughout the world during the past two years. Regrettably, most of our alumni will not even have heard of it when they graduated prior to 1998, but it is already the medium of choice for many of our faculty for delivery of a whole range of course-related material to students. Students like it because the material is always readily available and it is possible for faculty to interact with students in ways that were, at best, extremely inconvenient in the past. WebCT is now used in most of our undergraduate courses.

However, its real advantage can be exploited most effectively by delivering a wide variety of course material to alumni and other graduates who are already in the work place and who wish to

receive updated or new educational material in packages that may be as small as a single lecture or as extensive as an entire set of professional development courses. It is now feasible for alumni to contact us and to have access to undergraduate course material that is available on individual course Web CT sites. This information can be accessed conveniently from home or wherever you have access to the internet.

We will be offering our first fully developed internet course during the summer of 2000. This will be a course on simulation of ore dressing plants and will be based on the popular MODSIM™ simulator that has been developed as a fully fledged windows application in this Department during the past several years. Anyone who is interested in taking this course should contact Karen Haynes in the departmental office for further details. The possibilities offered by the internet are so immense that it is impossible to even list them here. You will find an article by Saskia Duyvesteyn in the Newsletter that expands on this exciting aspect of our departmental activities. I hope many of you will be able to take advantage of this powerful outreach medium in the years ahead.

As always, this Department maintains an active and dynamic research program. In the past year faculty has been successful in

attracting research grants from both federal and private sponsors and I hope to see a steady increase in interaction between our research faculty and their counterparts in industry during the next year. I would encourage alumni to consider consulting departmental faculty on any tricky technical problem that confronts you in the workplace. Our strong and vibrant group of research faculty has an uncommonly diverse and interesting range of specialties. Each one of us is always very pleased to discuss research opportunities with you, and our graduate students, of course, benefit enormously from contact with real industrial research problems

Undergraduate students are more than ever interested in industrial internships during their curriculum. I would encourage any alumni who can facilitate the placing of undergraduates in internship positions to contact me or Karen Haynes.

SME will again be holding its annual meeting in Salt Lake City this year, and this is a wonderful opportunity for you to re-establish contacts with the Department. All of you will be most welcome to visit if you are coming to the SME meeting, and I hope to see many of you during that time.

Yours sincerely,

R. P. King

Alumni Activities

Since last year we have heard from a number of you, and many alumni have commented that they enjoy reading about what their former classmates are doing. If you haven't responded recently (in the past two years) to our questionnaire, please do so this year.

Jack Webster (BS '52) is Chairman of Webster-Hoff Corp. in Glendale Heights, Illinois. His previous positions include President and CEO of Webster-Hoff, and Superintendent, Plant Manger, and Works Manager, Chicago Works, for Alcoa. He is or has been Chairman of Workman's Comp Trust of Illinois; President of the Chicago section of APMI; and a coauthor of the MPIF Design Manual. He received one of five Distinguished Service Awards in Powder Metallurgy – MPIF Award. He is married with three children.

Albert B. Smith (MS '53) is retired, living in San Diego, and works part-time as a NADCAP auditor, auditing commercial and captive metallurgical laboratories for compliance with company, industry, and government specifications and procedures. His previous positions include metallurgical engineer at Titanium Metals Corporation; Manager, Metallurgical Section, Thiokol Chemical Corp.; Senior Section Leader, General Atomic Company; and Senior Staff Metallurgist, Convair Div./General Dynamics. He is married to Mary Colette (Bolte) Smith with three children and two grandchildren.

N. Lawrence Head (PhD '62) is retired and lives in Springville, Utah. He is specializing – successfully!! – in financial and property management. He has been a Senior Scientist and Electronic Microscopist at Ampex Corp.; a Professor at San Jose State University; and an Engineer for IBM. He received IBM's Outstanding Contribution Award in 1983 before his retirement. He served a mission to Birmingham, England in 1995 to 1997 with his wife. They have been married 43 years and have seven children.

Khin Maung Win (MS '62, PhD '65) retired after 42 years of government service in Myanmar. However, he still does some part-time teaching of the Master of Engineering courses for the Metallurgical Engineering Department at the Yangon Institute of Technology and research as well. It is a small department, but

despite hard currency problems, almost obsolete equipment, and difficulty in obtaining technical literature, they manage to produce qualified metallurgical engineers who do well whether they are working for industry or doing postgraduate studies abroad.

Richard (Lloyd) Miller (PhD '68) and his wife Nedra have been serving LDS missions in the Mesa (Arizona) Regional Family History Center since his retirement four years ago; "Great work and keeps my bishop off my back," he says. He adds, "Oh, by the way, my physician told me to retire or die of a heart attack." He and Nedra are the parents of two girls and four boys and have nine grandchildren (his hobby) and three great-grandchildren. He does a little scientific and metallurgy work with a cousin that is a geologist. He worked more than twenty-four years at the Idaho National Engineering Laboratory in Idaho Falls, mostly on corrosion, materials engineering, internal consultation, and reviewing proposals. He taught for the University of Idaho at the Idaho Falls Center for Higher Education for about 22 years, and had a lot of contact with fellow alumnus Dr. Keith A. Prsbrey in this activity. Previous to the INEL experience he taught metallurgical engineering at the University of Washington for a year. He has been trying to accumulate some equipment to do some mineral testing, more to keep his sanity than to make money. He has a Denver Model 12 system, an old WEMCO lab cell, a Galigher lab cell, and some assorted cells of local construction; a Mine and Smelter 4x6 crusher, a couple of motorized grinders, a couple of sieve shakers, a bunch of sieves; an AA, a pH meter or two, some spectrophotometers, etc. He plans to run a few tests to satisfy his own curiosity then divest himself of the laboratory.

Ernie Bloore (PhD '71) visited the department recently. He retired from the Army Metallic Materials Branch and now has his own company in plasma-intrusion processing to form functionally graded metal-ceramic composites in situ.

M. Shamsuddin (Research Associate with Dr. Sohn, August 1979-August 1980) has been a Professor of Metallurgical Engineering at Banaras Hindu University in Varanasi, India, since February, 1987, where he teaches undergraduate and graduate courses, does research on semiconducting intermetallics, metal hydrides, etc., and coordinates the chemical metallurgy laboratories. His previous positions include Reader in Process Metallurgy (Physicochemical Measurements) at BHU; Research Associate, James Franck Institute, University of Chicago; and Visiting Associate Professor (1980-81) at the Department of Materials Science and Engineering, Massachusetts Institute of Technology. He has received the Young Scientist Medal, INSA, 1975; the Pandya Memorial Medal, Indian Institute of Metals, 1975; the Best Metallurgist Award, Ministry of Steel and Mines, Government of India, 1993; the MRSI Medal, Materials Research Society of India, 1995; and the Kharazmi Award, Government of Iran, 1996. He enjoys reading the history of metallurgy and religions. He married Abida Khatoon in October 1970 and has a daughter and four sons.

Dusan Milojkovic (MS '81) works a two-weeks rotation at Eskay Creek Mine in British Columbia. He says it's the best job he's had until now. His wife Dusanka works for Cominco Engineering. Son Alex, 16, is again Athlete of the Year, and regularly first team all-star player in basketball. Daughter Tanya, 13, got the Principal's Award and is starting high school.

Phil Sibrell (MS '85, PhD '91) is an engineer with the Biological Resources Division of the U.S. Geological Survey in Leetown, West Virginia, testing a new method of treating acid mine drainage with limestone in a fluidized bed. He was a chemical engineer with the U.S. Bureau of Mines, in Reno, Nevada, until the USBM was abolished in 1996; and a chemist and chemical engineer, U.S. Bureau of Land Management, Helium Operations, in Amarillo, Texas, until Helium Operations was abolished in 1998. He explores the "historic highlands" area of West Virginia, Maryland, Pennsylvania, and Virginia, learning about the civil war and walking along the C&O Canal along the Potomac River. He and wife Kathy (ME, Bioengineering, U of U, '96) have two boys, Paul, age 4, and Jack, age 1.

Rohit Verma (MS '91) is an Assistant Professor of Operations Management at DePaul University in Chicago. He teaches and does research in product design, quality management, service operations, operations strategy, and marketing/operations management interface. He was a Visiting Assistant Professor there 1995-96 and has held visiting positions at University of Sydney, Australia, July-Dec. 1998 and Helsinki School of Economics, Finland, December of 1996 and 1998. He received a Teaching Innovation Award from DePaul University in 1998 and a research grant from the U.S. Forest Service, the American Production and Inv. Control Society, and Marketing Science Institute. He is working on developing an on-line learning environment. He enjoys travel, developing web applications (www.depaul.edu/~rverma), and playing with his and his wife Amita Verma's (M.S. U of U Mat. Sc. 1993) two children, Pooja, born Sept. 1995, and Rishi, born July 1997.

Goro Yamauchi (visitor August '94-Sept. '95, currently Adjunct Associate Professor) is currently a Professor in the Department of Mechanical Engineering at the Daido Institute of Technology, Nagoya, Japan. After his visit to our department he was Project Leader, New Materials Project, NTT Technical Assistant & Support Center, Japan, and received the NTT President Award for Developing Water Repulsive Materials. He enjoys walking and listening to music.

Kang Jung (PhD '95) is working at the Materials Research Center, NCSU, Raleigh, North Carolina.

David Faerber (BS '96) is Corporate Metallurgical Engineer with Schaeffer Industries in Lindon, Utah. He instituted the quality control department, developed SPC for a structural tube mill, orchestrated customer certification process, maintained and calibrated testing equipment, and is developing and implementing a corporate documented quality system. Previously he was a metallurgical engineer and quality engineer in Phoenix, Arizona, and says it is nice to be back in Utah (three exclamation points). He was Lead Auditor of ISO 9000 Quality Systems. He and Kimberly have been married since September 1995 and were blessed in summer 1998 with a bouncing baby boy, Ammon. He enjoys gardening, hiking, and reading.

In Memoriam

Elmer C. Speers (BS '40) is deceased. Our sympathies to his family and friends.

George M. Adamson (BS '41) died October 20, 1998 at age 78. He worked for the American Smelting and Refining Co.'s copper smelter in Garfield, Utah from 1941 until he was drafted, after which he developed mortar guns at the Chemical Warfare branch of the Army in Alabama and then spent the last two years of the war at the Oak Ridge National Laboratory. Later he worked on high-temperature, fused-salt, and liquid-metal corrosion studies for the Aircraft Nuclear Propulsion program and was responsible for many of the personnel functions for Oak Ridge's Metals and Ceramics Division and authored or coauthored 29 publications. For recreation, he built a cottage on Watts Bar Lake where he taught his sons to waterski. Following a heart attack in December 1985, he retired Feb. 28, 1986, after 39 years with Oak Ridge, and had quadruple bypass surgery in 1993. After retirement he was a member of the Holston Rose Society and won blue ribbons in several area shows. He is survived by his wife, June, a son Neil, and two grandsons, all of Boise, Idaho; and two sisters, Barbara

Adamson and Majorie Kreitman of Vancouver, Washington. Another son, Stanley, was killed in an avalanche in 1971, and Mr. Adamson's younger brother Charles died in 1981.

John R. Weeks IV (MS '49, PhD '53) died Jan. 9, 1998 at age 70, after being hospitalized for a blood infection with myelodysplasia, a form of cancer (believed by his doctors to be not related to his work). He was born in South Orange, New Jersey. He earned a metallurgy degree from the Colorado School of Mines in 1949 before coming to the University of Utah. He joined Brookhaven National Laboratory as an associate metallurgist in 1953. He spent two years at the former Atomic Energy Commission and served as a metallurgical adviser to the designers of the High Flux Beam Reactor. He was a consultant to the U.S. Nuclear Regulatory Commission and the U.S. Defense Nuclear Facilities Safety Board and served on scientific advisory panels analyzing the nuclear power accidents at Three Mile Island in 1979 and Chernobyl in the former Soviet Union in 1986. He wrote approximately 100 scientific papers in the areas of corrosion, stress-corrosion cracking and failure and analysis of materials used in nuclear power plants and

was an adjunct professor of metallurgy and nuclear engineering at Polytechnic University of New York and an adjunct associate professor of materials science at the State University of New York at Stony Brook. He retired from BNL as a senior metallurgist in December 1995 and thereafter served as a consultant for the lab's Department of Advanced Technology. He was a Life Member and Fellow of ASM International, a member and past-president of the Long Island Section of the American Nuclear Society, and an

active member of the Metallurgical Society of AIME. For over four decades he played the organ and composed liturgical music for Long Island churches. He is survived by his wife, Barbara Ann Brewster; a son, John V; a daughter, Ann Weeks; a sister, Susie English; and a granddaughter Eleanor Lustig.

Garff McMullin (BS '50), of Salem, Utah, died in 1996. Our condolences to his family and friends.

Wave of the Future?

In the past year the department has made significant inroads in using a variety of internet-based tools to enhance the educational experience for students. The University of Utah has selected to support WebCT, which is one of the leading commercial tools for the development of course web pages. WebCT simplifies both the process of creating and administering Course web pages. Through the Web pages, the students can view their grades at any time, download course material, view video clips, and even take on-line quizzes, which are graded automatically. Currently there are eleven courses in the Department that have utilized at least some form of supplemental material accessible via the web. They include Corrosion Engineering, Fluid Flow, Hydrometallurgy, Introduction to Extractive Metallurgy, Materials & Energy Balances, Metals & Civilization, Mineral Processing I & II, Process Design & Economics, Statistical Methods, and Thermodynamics & Phase Equilibria.

Those interested can take a look at one such course web page by accessing the URL

<http://webct.cc.utah.edu/webct/homearea/homearea>

When prompted, enter the username 'metallurgy' and password 'utah'. Click on "Introduction to Metallurgical Engineering" to enter the course web page. If you have any problems or wish to access other course web pages, please contact me at saskia@mines.utah.edu.

During the Spring semester, students will be taking a high-temperature extractive metallurgy course through the internet. The students will not simply read materials on-line or download them, but will also watch live and recorded "netcasts" of lectures and participate in live tutorial sessions via the internet.

This course is making use of one of the other major distance learning tools developed by Lotus Notes called Learning Space. It allows users to download the materials to their computer and work off a local copy then update the materials on a regular basis by accessing the remote server.

Future plans include offering on-line professional development courses, making it possible to complete the course from home, work or anyplace with internet access. The first of these, entitled *Modeling and Simulation of Mineral Processing Plants*, will be offered from May 15th to July 22nd this year by Dr. R. Peter King and Dr. Claudio L. Schneider. It will give those enrolled an opportunity to learn how to use MODSIM™ to simulate the operation of mineral processing operations. For more information with regards this on-line course contact Dr. Schneider at cschneid@mines.utah.edu.

Saskia Duyvesteyn

International Visitors

International visitors to the department this year include:

Dr. Barbara Wawrzacz, NATO Scholar with Dr. Miller (Nov. '98-Jan '00), Technical University of Gdansk, Poland.

Dr. Xu-Dong Li, Postdoctoral Fellow with Dr. Ravichandran, (April '98-'99), Open University, U.K.

Dr. Jakub Nalaskowski, Postdoc with Dr. Miller (March '97-present), Technical University of Gdansk, Poland.

Mr. Robert Aranowski, Research Associate with Dr. Miller (Nov '99-present), Technical University of Gdansk, Poland.

Dr. Mohamed Kamal Abdel-Rahman, Visiting Scholar with Dr. Rajamani (Sept '99-present), Central Metallurgical R&D Institute, Helwan, Cairo, Egypt.

Mr. Murat Muduroglu, Research Assistant with Dr. Miller (July-Sept. '99), Istanbul Technical University, Turkey.

Dr. Mehmet Celik, visiting Dr. Miller (June-Aug. '99), Dept. of Mineral Engineering, Istanbul Technical University, Turkey.

Dr. Simon Biggs, visiting Dr. Miller (June 10-12, 1999), Dept. of Chemistry, Univ. of Newcastle, Callaghan, Australia.

Dr. Ko Higashitani, visiting Dr. Miller (4-6 July '99), Dept. of Chemical Engineering, Kyoto University, Japan.

Dr. John Davidtz, visiting Dr. Miller (July & Dec. '99), Dept. of Metallurgy and Materials Science and Engineering, Univ. of Pretoria, South Africa.

Program Status

Our enrollment during the past years is as follows:

Year	Under-graduates	Graduates	Year	Under-graduates	Graduates
1977-78	53	36	1989-90	47	48
1978-79	53	33	1990-91	53	49
1979-80	50	46	1991-92	63	46
1980-81	61	58	1992-93	53	42
1981-82	71	40	1993-94	54	43
1982-83	62	41	1994-95	45	43
1983-84	40	42	1995-96	25	38
1984-85	36	42	1996-97	27	38
1985-86	37	40	1997-98	27	32
1986-87	28	38	1998-99	29	30
1987-88	36	50	1999-00	23	28
1988-89	37	46			

Our alumni now number 795. New graduates include:

B.S. Degree

JoAnna Bailey	Heidi Petersen †
Shannon Farey*	Gerald J.-C. Pond
Joseph M. Fox	Ryan Evan Winter

*Oblad Medal of Excellence

†Outstanding Senior Student

M.E. Degree

Jinshan Li	Soham Tillu (Dec. '99)
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M.S. Degree

Dong-Man Kim	Clyde Lauritz Larsen
Laurie Lee LaPlante	Xuming Wang

Ph.D. Degree

KyongJun An	Amlan Datta
William M. Cross	Dong Hoon Han (Dec. '98)

Student Recognition

The Award for Outstanding Freshman Student this year went to **Stephen C. Smith**. Steve graduated from Olympus with a 3.783 g.p.a., and his g.p.a. for his first semester at the U was 3.63. He received a Newmont Scholarship. He has gone on an LDS mission to Rio de Janeiro, Brazil.

1999's Outstanding Sophomore was **Michael Snow**. Mike's Sophomore g.p.a. was 3.8. He graduated from Bountiful High in 1995 with a 3.84 g.p.a., including several A.P. courses. He was 1996's Outstanding Freshman before leaving to serve a mission. He received the Walmart Scholarship in 1995–96, '98–99, and 1999–2000 and is a Kennecott Scholar for 1999–2000.

Michael Hales was the Outstanding Junior Student. Mike had a 3.43 g.p.a. at Skyline High School, and achieved a Junior year g.p.a. of 3.71. He has received the SME Local Section, Special Departmental, and Continuing Student Department Scholarships, and last year was a Kennecott Scholar and received the Billings Scholarship. Mike was also the previous year's Outstanding Sophomore.

The Outstanding Senior Student for 1998–99 was **Heidi Petersen**. Heidi graduated from Skyline High in 1993 with a 3.855 g.p.a., She received the Mining and Mineral Resources Research Institute Scholarship, the Alumni Association Scholarship, the Newmont Metallurgical Scholarship, and the Ramaswami Woman in Metallurgy Scholarship. She served an LDS mission to Washington, DC. During her time at the University she has played cello with the University Symphony Orchestra and worked for Dr. King in our department. She graduated Fall Semester 1998 with a g.p.a. 3.725 for the year and now works for O.C. Tanner.

The Oblad Medal of Excellence in Metallurgical Engineering goes to the student who did the best overall during their years with the department. This year that student was **Shannon Farey**. Shannon's cumulative university g.p.a. was 3.63. She had a 3.896 g.p.a. at Taylorsville High and a 3.951 from Salt Lake Community College and has received the Newmont Metallurgical Services Scholarship, the Joe Rosenbaum Scholarship, and the Kennecott

Scholarship. She served for two years as our Department Undergraduate Student Advisory Representative and received the Outstanding Sophomore and Outstanding Junior Awards. She worked with the Salt Lake Community College as Liaison for Current Enrollment for Architecture Technology for Science and Technology after graduation, before accepting a position with ASARCO.

Insoo Kim was the recipient of the Department award for best teaching assistant. Insoo was the T.A. for Met.E. 3220 Fall Semester and for Met.E. 572 last Spring Quarter. Students said he was always friendly and willing to help. He is from Kangwando, Korea, and received his M.S. in Metallurgical Engineering from Hanyang University in Seoul. He did his doctoral research with Dr. Cho on "The Effects of Reactive Elements on High-Temperature Oxidation of Fe₃Al Alloy" and was awarded a University of Utah Research Committee Graduate Fellowship in 1996–97. He finished the work for his degree and holds a postdoctoral position in the Department.

The Graduate Seminar Award for best student presentation went to **Mehmet Hancer** for his seminar "The Flotation Chemistry of Soluble Salt Minerals" presented on November 18, 1998. Mehmet is from Tokat, Turkey and is doing research toward a Ph.D. under the supervision of Dr. Miller.

This is the first year the department awarded the Franklin and Elizabeth Alex Scholarship. There are two recipients. The first is **William Chatwin**. Will is a junior, transferring from Lewis and Clark University, and has been recognized for outstanding achievement as a National Merit Scholar. He is the son of Adjunct Associate Professor Terry Chatwin.

The other Alex Scholarship went to **Christian Nilsson Brown**. Christian graduated from Olympus High School with a 3.820 g.p.a. He has previously received the Newmont Metallurgical Scholarship and the American Society for Metals Bonneville Chapter Scholarship. He holds a part-time job at Kennecott and serves this year as the President of the Joint Student Chapter of ASM/TMS.

The College Award for the Outstanding Teaching Assistant was **Naiyang Ma**. Naiyang has displayed excellent capabilities in helping them understand the subject being taught. Both faculty and students are very impressed with his knowledge, preparation, and

dedication in helping students comprehend complex material..

Congratulations to all our students for their scholastic achievements!

Prof. J. Gerald Byrne Retiring

At the end of 1999 we were disappointed to hear **Prof. J. Gerald Byrne** announce his retirement from the University.

Gerry Byrne graduated as a mechanical engineer from Stevens Institute of Technology, in 1953 and, while in industry, completed an M.S. in Metallurgy at Stevens at nights in 1957. His Ph.D. from Northwestern in 1960 broke new ground in the theory of age hardening. After two years with the Fundamental Section of the Dow Metals Product Co. exploring dynamic recrystallization and precipitation hardening in Mg alloys, he joined the Stevens faculty in 1962 and then the U of U faculty in 1966 as an Associate Professor. His research then moved into the fundamentals of fatigue, chemical vapor deposition, thermomechanical processing, and the application of positron annihilation to studies of deformation, phase transformations, radiation damage and superconductivity. In 1968 he was promoted to the position of Professor at the University of Utah in which capacity he served both the Departments of Metallurgical Engineering and Materials Science and Engineering.

In 1980 Gerry was certified by the Professional Ski Instructors of America. He was named a Fellow of the American Society for Metals in 1982 and served as chair of the Metallurgical Engineering faculty from 1986 through 1998. In 1987 he was appointed as Ivor D. Thomas Professor. He authored one book,

Recovery, Recrystallization and Grain Growth (MacMillan Materials Science Series, 1965, translated into Japanese 1968) and 143 publications.

His contribution as a teacher was recognized with the Outstanding Teacher Award in 1992-93 and is evidenced by one student comment of praise, "Dr. Byrne is, beyond a doubt, the best professor I have had the pleasure to have in my seven years at the University of Utah. If everyone was as interested as he is in teaching and not humiliation on tests, etc., this would be a much better school. I can't write enough on this paper to do this man justice."

He has made invited presentations on many aspects of metallurgy both in the U.S. and abroad, and he has contributed significantly to the prestige of this Department. His long service to the Department means that he is known to the vast majority of our alumni, and he has a considerable reputation among this group as well as within the metallurgical profession as a whole.

He retired in December 1999. Gerry has agreed to serve as Professor Emeritus and intends to spend some of his time with us at the U. I'm sure you will all want to join us in thanking Gerry for his years of service to the department and wishing him all the best for the years to come.

Faculty and Staff

The faculty, staff, and students are pleased that **Professor R. Peter King** agreed to serve as Chair of our Department, effective 1 July 1999. Dr. King has had considerable experience not only as a teacher and a researcher, for which he is internationally recognized, but also as an administrator. He has demonstrated his administrative abilities as Head of the Department of Metallurgy and Materials Engineering at the University of Witwatersrand, President of the South African Institute of Mining and Metallurgy, and Director of the USBM Generic Mineral Technology Center for Comminution at the University of Utah. He has served on the Chemical Engineering Faculty at the University of Natal, the Metallurgy and Materials Engineering Faculty at the University of Witwatersrand, and the Metallurgical Engineering Faculty at the University of Utah. In all these assignments he has served with distinction, and we believe that Peter will be more than able to lead

our Department to the next level in our efforts to excel in higher education.

Department staff includes Office Support Coordinator **Mrs. Karen Haynes**, Administrative Secretary **Ms. Kay Argyle**, and Technician **Mr. Jim Davis**.

The recipient of this year's Mellow Met Award for Excellence in Teaching Metallurgical Engineering and the College Teaching Award was **Dr. Saskia Duyvesteyn**. Dr. Duyvesteyn taught Met.E. 1610 Fall 1998 and Met.E. 3620 Spring 1999. Students said the course was challenging and they were forced to work hard, but that they enjoyed the course, were impressed by her enthusiasm, and looked forward to taking another from her. Congratulations Saskia!

The faculty now totals twenty-nine, which includes six research, eleven adjunct, and four emeritus appointments.

<u>faculty</u>	<u>title</u>	<u>phone</u>	<u>email</u>
J. G. Byrne	Professor Emeritus	801/581-8128	jgbyrne@mines.utah.edu
W. D. Callister	Adjunct Professor		bill.callister@m.cc.utah.edu
T. Chatwin	Adjunct Associate Professor	801/581-6348	terrance.chatwin@m.cc.utah.edu
W. D. Cho	Research Associate Professor	801/581-6278	wdcho@mines.utah.edu
S. Duyvesteyn	Assistant Professor	801/585-5900	saskia@mines.utah.edu
M. L. Free	Assistant Professor	801/585-9798	mfree@mines.utah.edu

S. Guruswamy	Professor	801/581-7217	sguruswa@mines.utah.edu
D. Halbe	Adjunct Professor	801/582-3655	dnhalbe@aol.com
S. L. Halgedahl	Adjunct Associate Professor	801/585-3963	shalg@mines.utah.edu
G. W. Healy	Adjunct Professor		
J. A. Herbst	Research Professor	808/324-6100 (Hawaii)	john.herbst@jah-net.com
J. Hupka	Research Professor	48-58-347-1791 (Poland)	jhupka@chem.pg.gda.pl
C. Jansen	Adjunct Professor	801/581-7792	chris@tto.utah.edu
A. Khandkar	Adjunct Associate Professor		
R. P. King	Professor and Chair	801/585-3113	rpking@mines.utah.edu
C. L. Lin	Res. Assoc. Prof.	801/581-5309	cllin@mines.utah.edu
J. D. Miller	Professor	801/581-5160	jdmliller@mines.utah.edu
F. A. Olson	Professor Emeritus		
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You may visit us at our website, <http://www.mines.utah.edu/metallurgy>.

If any of you (especially those living and working locally) would be interested in receiving notices of our weekly graduate seminar, we can send these either by fax or by email. To get onto our distribution list, contact Kay by phone (801) 581-6386, fax (801) 581-4937, or email argyle@mines.utah.edu.

Once more we are able to distribute the Mellow Met Newsletter without charge. The cost for publication and distribution is paid by the Department. I'm sure you recognize the financial squeeze on higher education budgets during the past years, and in this regard we request your financial support of Department activities by making an appropriate donation to the Department Development fund. Thank you for your generosity. Please make your check payable to Department of Metallurgical Engineering Development Fund.

We are still attempting to expand our alumni directory to include email addresses. Please respond with this information (to jdmliller@mines.utah.edu or metallurgy@mines.utah.edu). We would like to begin a more complete electronic transmission next year.

The faculty and staff wish you a prosperous year and hope you will visit us when the opportunity arises.

Your faithful correspondent,
J. D. Miller

Professor of Metallurgy