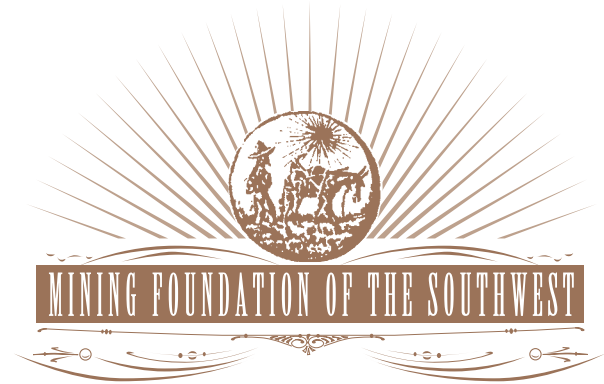




**Mining Foundation
of the Southwest**

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Twenty-Third Annual

**American
Mining Hall of Fame
Awards Presentation
and Banquet**

December 3, 2005

Tucson Marriott University Park, Tucson, Arizona



2005 Program

6:30 p.m. Reception
7:00 p.m. Banquet Dinner
8:30 p.m. Ceremony

Welcoming Remarks: **Roshan Bhappu**

Introduction of Head Table
and Other Honored Guests: **Roshan Bhappu**

Awards Presentation: **William Dresher**

Presentation of 2005
Inductees From
Mining's Past: **Forbes Wilson**
*Presented by
Milton Ward*

Charles Meyer
*Presented by
Spencer Titley*

Presentation of 2005
Medals of Merit: **Larry McBiles**
*Presented by
William Dresher*

Wayne Hazen
*Presented by
Terry McNulty*

Presentation of 2005
Industry Partnership Award: **Northwest Mining
Association**
*Presented by
John Lacy*

Presentation of 2005
Inductee: **Pierre Lassonde**
*Presented by
Roshan Bhappu*

Featured Address: **Pierre Lassonde**

Adjournment: **Roshan Bhappu**

The American Mining Hall of Fame Committee of the Mining Foundation of the Southwest would like to thank Modular Mining Systems, Inc. for its continued support by typesetting/design and printing this evening's programs. Modular has provided this contribution for many years.

Special Thanks





American Mining Hall of Fame

Medal of Merit Recipients

Medal of Merit Recipients (1989-2004)

- 1989 Ralph J. Roberts
- 1989 Victor H. Verity

- 1990 John S. Livermore

- 1991 George O. Argall, Jr.

- 1992 Arthur A. Brandt
- 1992 William C. Epler

- 1993 Walter E. Heinrichs, Jr.
- 1993 Willard C. Lacy

- 1994 Donnell W. Agers
- 1994 J. David Lowell
- 1994 Ronald R. Swanson

- 1995 Warren Kay Pincock

- 1996 Richard W. Hutchinson
- 1996 Charles L. Pillar

- 1997 Hugo T. Dummett
- 1997 Spencer Rowe Titley

- 1998 David N. Skillings, Jr.
- 1998 José Rubén Velasco Rodríguez

- 1999 Paul S. Allen
- 1999 William C. Peters

- 2000 Leonard Harris
- 2000 Pedro Sánchez-Mejorada

- 2001 William H. Dresher
- 2001 Warren E. Fenzi

- 2002 Richard D. Call
- 2002 Kenneth L. Zonge

- 2003 Stanley H. Dempsey
- 2003 James William White

- 2004 Edward S. Frohling
- 2004 Dr. Joaquin Ruiz



PLATINUM

Newmont Mining Corporation

GOLD

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M3 Engineering & Technology Corp.
Phelps Dodge Mining Company*

SILVER

*Aker Kvaerner
Benefit and Retirement Strategies
Boart Longyear
Call & Nicholas, Inc.
Caterpillar Foundation
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Errol L. Montgomery & Associates, Inc.
Glamis Gold Ltd.
Golder Associates Inc.
Independent Mining Consultants, Inc.
Industrial Motor and Control, Inc.
J. S. Hardy
KD Engineering & Metcon Research
Kennecott Utah Copper/Resolution Copper
Krebs International
Layne Christensen Company
Lowell Mineral Exploration
Meridian Engineering Co.
Mintec, inc.
Mountain States R & D, International Inc.
Phelps Dodge Exploration
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Mining Foundation of the Southwest

Mission and Accomplishments

The Mining Foundation of the Southwest was incorporated in 1983. The purpose of the Foundation is to promote public understanding and education related to the mining industry, both in the U.S. and abroad. Toward this goal, the Foundation has been able to help fund a number of projects each year from donations and fund-raising activities, the most recent of which include:

- Funding for student recruitment and other projects at the University of Arizona, Colorado School of Mines, Mackay School of Mines at the University of Nevada, New Mexico Tech, La Universidad de Sonora in Hermosillo, Sonora, Mexico, and Arizona Historical Society Museum;
- Publication and sale of a three-volume set of the History of Mining in Arizona;
- Publication and distribution of an information bulletin about the impact of mining and minerals on Arizona to Arizona decision-makers;
- Provision of guest speakers on geology and mining-related topics for southern Arizona schools and other organizations;
- Funding for transportation of school children to the ASARCO Mineral Discovery Center south of Tucson;
- Funds for the preparation of self-guided tour brochures for the University of Arizona Mineral Collection at the Flandrau Science Center;
- Funding to La Asociación de Mineros de Sonora to help sponsor the First Gem and Minerals Exhibition in Hermosillo, Sonora, Mexico;
- Funding for a cooperative effort with the U. S. Forest Service for installation of geology-related interpretive signs on the Mount Lemmon Highway near Tucson.

December 3, 2005 marks the 23rd anniversary of the Foundation's American Mining Hall of Fame Awards Ceremony and Banquet. The American Mining Hall of Fame serves to educate the public about prominent persons associated with the mining industry in both past and present times by inducting three living honorees, two deceased luminaries, and one supporting organization or person into the Hall of Fame each year. Including this year's inductees, 120 persons and organizations have been honored by the Foundation. Plaques commemorating each of these inductions are on display at the Arizona Historical Society Museum at 949 East Second Street, Tucson, Arizona.



Inductees From Mining's Past (1983-2004)

Maxie L. Anderson	1934-1983
Frank William Archibald	1920-1987
James Boyd	1904-1987
Bert S. Butler	1877-1960
Nellie Cashman	1849-1925
Louis S. Cates	1881-1959
William Andrews Clark	1839-1925
James Colquhoun	1857-1954
James Harold Courtright	1908-1986
John Van Nostrand Dorr	1872-1962
James Douglas	1837-1918
James Stewart Douglas	1868-1949
Charles F. Fogerty	1921-1981
Antoine M. Gaudin	1896-1974
Wesley P. Goss	1899-1985
William C. Greene	1853-1913
John C. Greenway	1872-1926
Meyer Guggenheim	1825-1905
Hal W. Hardinge	1855-1943
George Hearst	1820-1891
Joseph Austin Holmes	1859-1915
Herbert C. Hoover	1874-1964
Daniel C. Jackling	1869-1956
H. Myles Jacob	1913-1997
Ira B. Joralemon	1884-1975
Henry Krumb	1875-1958
John Cromwell Lincoln	1866-1959
Waldemar Lindgren	1860-1939
Curtis H. Lindley	1850-1920
John William Mackay	1831-1901
Donald H. McLaughlin	1891-1959
Seeley W. Mudd	1861-1926
Georges Ordoñez	1907-1982
Jorge Larrea Ortega	1912-1999
Charles Debrille Poston	1825-1902
Frederick Leslie Ransome	1868-1935
Rossiter W. Raymond	1840-1918
Kenyon E. Richard	1915-1993
Robert H. Richards	1844-1945
Thomas A. Rickard	1864-1953
Louis D. Ricketts	1859-1940
Bernhardt Rohe	1909-1992
Reno H. Sales	1876-1969
Harrison Ashley Schmitt	1896-1966
Fred Searls, Jr.	1888-1968
Antonio Siraumea	1710-1760
Arthur F. Taggart	1884-1959
William Boyce Thompson	1869-1930
Howard Allen Twitty	1909-1989
Thomas F. Walsh	1850-1910
Arthur Redman Wilfley	1860-1927
Edward H. Wissner	1895-1970



American Mining Hall of Fame

Inductees from Mining's Past





American Mining Hall of Fame

Inductees and Industry Partnership Awards

Inductees (1983-2004)

1983	George E. Atwood
1984	Charles F. Barber
1985	George B. Munroe
1986	John C. Duncan
1987	Plato Malozemoff
1988	Simon D. Strauss
1989	G. Robert Durham
1990	Harry M. Conger
1991	Kenneth J. Barr
1992	T S Ary
1993	Milton H. Ward
1994	J. Burgess Winter
1995	Douglas C. Yearley
1996	Richard de J. Osborne
1997	James R. Moffett
1998	Charles G. Preble
1999	Irl F. Engelhardt
2000	Ronald C. Cambre
2001	A. Dan Rovig
2002	J. David Lowell
2003	Thomas J. O'Neil
2004	J. Steven Whisler

Industry Partnership Awards (1995-2004)

1995	Caterpillar, Inc. - Glen A. Barton
1996	Amigos (Arizona Mining & Industry Gets Our Support)
1997	Colorado School of Mines
1998	Stephen D. Bechtel, Jr. and Bechtel Corporation
1999	Mineral Information Institute
2000	Modular Mining Systems, Inc.
2001	Mintec, inc.
2002	Senator Larry Craig
2003	Aker Kvaerner
2004	Mining and Metallurgical Society of America

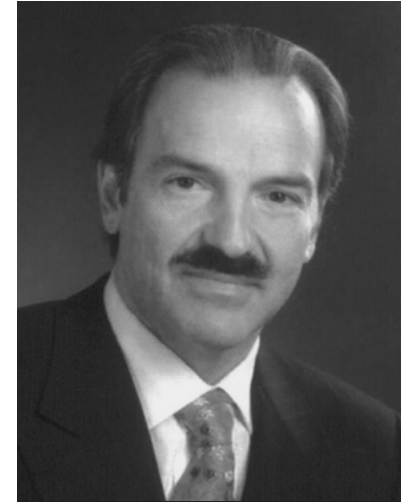
Pierre Lassonde was elected President of Newmont Mining Corporation, effective February 2002. He joined the Company following Newmont's acquisition of Franco-Nevada Mining Corporation Limited, which he co-founded and served as President and Co-Chief Executive Officer from 1982.

He began his mining career with Bechtel Corporation in San Francisco as a Cost Engineer followed by a Senior Planning Analyst role with Rio Algom Ltd. in Toronto. In 1980 he went to work for one of Canada's largest institutional money managers, Beutel Goodman & Co., heading their precious metals division as President. He managed the very successful Dynamic Precious Metal Fund. Mr. Lassonde is one of the most prominent gold commentators and the author of the *Gold Book, The Complete Investment Guide to Precious Metals*.

He has a Bachelor of Arts degree from the University of Montreal in 1967 and a Bachelor of Science degree in Electrical Engineering from École Polytechnique in 1981. He graduated with a Master of Business Administration degree from the University of Utah in 1973 and was designated a Professional Engineer by the Association of Professional Engineers of Ontario in 1976. Mr. Lassonde earned the qualification of Chartered Financial Analyst from the University of Virginia in 1984. The University of Toronto conferred him an Honorary Doctorate in 2001 and the University of Montreal in 2002. In January 2003 he was made a member of the Order of Canada. In March 2005 he was elected the Chairman of the World Gold Council. He was also the recipient of the D. C. Jackling Award of the Society of Mining, Metallurgy and Exploration (SME) in 2005.

Pierre Lassonde has made wide-ranging contributions to his profession as a successful businessperson, philanthropist, community leader and supporter of mining education and research. He established the Lassonde Institute for Engineering and Geoscience at the University of Toronto, which has revitalized that university's Mineral Engineering program. He is also a long time supporter of the Canadian Mining Hall of Fame, which has existed largely due to his support and involvement.

Lassonde's strong commitment to developing the knowledge and skills of the next generation is reflected in his remarks, "We should never forget that the most important natural resource of our country is not nickel, gold or diamond, but its people."



Pierre Lassonde

2005 Inductee and Guest of Honor





**Forbes Kingsbury
Wilson
(1910-1990)**

**2005
Inductee from
Mining's Past**

Forbes Kingsbury Wilson was born in York, Maine, on February 16, 1910. He was educated at Worcester Academy in Massachusetts and graduated from Yale University in 1931 with a degree in Mining Geology.

Upon graduation he worked as a shift boss at the Braden Copper Company in Chile until 1933. From this time on he held a succession of jobs: Mine Superintendent and General Superintendent Manager, Minera Timmins Ochali Mining Company in Colombia; Administrative Manager, General Engineer and General Manager, Freeport Minerals Company's Nicaro Nickel Company, Cuba and President, Rising & Nelson Slate Company, Vermont. In 1951 he rejoined the Freeport Minerals Company as Manager of Exploration in New York City. By 1956 He became Vice President and in 1970, Senior Vice President. In 1966 he became President and Director, Freeport Indonesia, Inc. a subsidiary of Freeport Minerals Company. He retired from Freeport in 1974.

Forbes Wilson's greatest accomplishment was the development of the Ertsberg copper deposit in New Guinea (now Irian Jaya, Indonesia). This was a copper-rich outcrop on the side of a 9000-foot mountain tucked deep in an almost impenetrable jungle. In May of 1960, he set out with an expedition of some co-workers and Irianese for a 17-day hike over some of the world's most treacherous terrain – just to get rock samples of the Ertsberg. As he describes in his book, *The Conquest of Copper Mountain* (Athenaeum, New York, 1981), although he had had extensive experience in exploration on mule back in the Andes, nothing he had undertaken resembled the overland hikes required to penetrate the New Guinea jungle. Wilson not only had to deal with unknown land, but also the threat of malaria and other diseases, the continuous bad weather, and the indigenous people who still practiced Stone-Age customs. On July 1, 1973 the Ertsberg became operational.

Subsequently, largely based on Wilson's geologic interpretation of the region, in 1988 the Grasberg copper-gold deposit was located. Today the Grasberg/Ertsberg complex is the world's lowest cost producer of copper.

Forbes Wilson received many honors during his career including the coveted Legion of Honor and the Daniel C. Jackling Award from the American Institute of Mining, Metallurgical and Petroleum Engineers.



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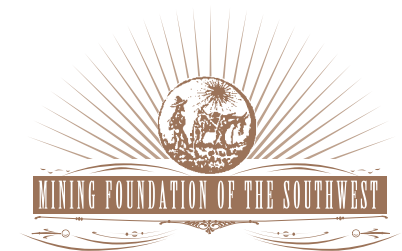
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**Mining Foundation
of the Southwest**

2005





Northwest Mining Association

2005 Industry Partnership Award

The Northwest Mining Association (NWMA) was founded in Spokane, Washington, in 1895 as a reaction to the encroachments of the railroad land grants upon the mineral lands in the Pacific Northwest. By 1909, the Association's voice expanded to include participation in national mineral policy issues, providing information to its membership on practical mining matters, and supporting and promoting the minerals industry throughout the states of Alaska, Idaho, Montana, Oregon and Washington, as well as the Canadian provinces and territories of Alberta, British Columbia, Northwest Territories and the Yukon.

Today, many say, "The only thing northwest about NWMA is its name and the location of its office" as the Association and its members are actively involved in exploration, mining operations and reclamation/closure activities throughout the United States, Canada and Mexico. NWMA serves also as the state mining association for Oregon and Washington states.

The Association's purpose is to support and advance the mineral resource and related industries, to represent and inform its members on technical, legislative and regulatory issues, to provide for the dissemination of educational materials related to mining, to foster and promote economic opportunity and environmentally responsible mining, and to protect access to public lands for mineral exploration and development. In performing these purposes, the Association has become the nationally recognized voice for the exploration sector and has a proven track record of successfully influencing the outcome of political dialogue.

The Association is now a recognized leader in building coalitions with other groups representing natural resource producers and people interested in the multiple-use of public lands. It continues to work closely with the National Mining Association, state mining associations, provincial and regional mining associations throughout Canada, and professional organizations including the Mining and Metallurgical Society of America (MMSA) and the Society for Mining, Metallurgy and Exploration (SME).

In October 1998, NWMA became the first mining association to adopt a Statement of Environmental Principles. In 2004, the Association received two leadership awards from the federal land management agencies. The United States Forest Service presented the Association with a silver medallion in recognition of NWMA as a strong, reasonable, knowledgeable and fair advocate for the domestic mining industry. The Bureau of Land Management presented NWMA with its Sustainable Development Award recognizing the Association's efforts in promoting mining and sustainable development.



Born September 30, 1915 in St. Louis, Missouri, Charles Meyer was a mining geologist and a teacher. He entered Washington University in 1933 and graduated with a B.S. degree in Geology in 1937 and an M.A. in 1939. He was awarded a graduate fellowship to Harvard where he studied the geology of metalliferous ores with L.C. Graton and Donald H. McLaughlin and received a M.A. in 1940. He moved then to Butte Montana, as a research geologist for the Anaconda Copper Mining Company where his life-long career in the study of ore geology took roots. At Butte, Meyer established a geological research laboratory and came under the influence of Anaconda's Chief Geologist, Reno H. Sales, with whom he commenced a detailed study of the mineralization in the district. The outgrowth of this study, probably the first of its kind that involved a thorough analysis of mineralogy and ore controls with laboratory support, was a detailing of the process of ore formation and its effect on wall rocks. The principles of alteration and its interpretation developed by Meyer more than 50 years ago have survived and become a worldwide basis of interpretation in ore-search by generations of exploration geologists. Based on this work, he was awarded a Ph.D. by Harvard University in 1950.

After 12 productive years at Butte, Meyer joined the faculty of the University of California at Berkeley in 1953. He retired to Sedona, Arizona, in 1982 from where he maintained his academic interests as an Adjunct Professor at the University of Arizona. During his years at Berkeley he worked with a group of brilliant students whose record of ore discovery and scientific contributions to the body of knowledge about ore forming processes is outstanding. He was a friendly and inspiring teacher and retained a continuing interest in geological research. Through this period, he retained a close connection with Anaconda and was a major contributor to the success of their exploration and development programs.

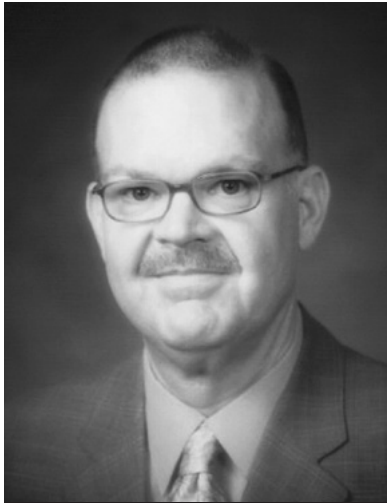
Charles Meyer was accorded numerous honors that included a Guggenheim Fellowship that he used to visit and study ore deposits in Africa, Europe, and Australia, and honorary lectureships at Harvard and in Australia. He was elected President of the Society of Economic Geologists and in 1982 he was awarded the Penrose Gold Medal by that Society. He remains best known for establishing the importance of basic science and laboratory studies to the problems of ore search. He had few peers in his field during the last half of the twentieth century and his fundamental contributions to the profession of geological exploration will endure.



Charles Meyer
(1915-1987)

2005 Inductee from Mining's Past





Larry McBiles

**2005
Medal of
Merit Recipient**

Larry McBiles is a national leader in promoting the teaching of young children about minerals and the mining industry. He currently serves as Executive Director of the Arizona Foundation for Resource Education (AFRE), a unique collaboration of business, industry and education interests. AFRE's mission is to promote understanding about natural resources and related industries by providing Arizona's K-12 teachers and non-formal educators real-world, hands-on educational programs and professional development opportunities that focus on the importance of Arizona's natural resources. A committed network of Arizona's natural resource businesses and industries supports the AFRE.

Dr. McBiles holds a Ph.D. in Curriculum and Instruction from Arizona State University. He has great pride in being a native Arizonan from Ajo and member of a fourth-generation family of copper miners. He began his career as an elementary school teacher and went on to the middle and secondary levels at Ajo High School where he developed a comprehensive program supporting the importance of copper in society. His program came to the attention of the Arizona Mining Association in the early 1980s. The Association appointed him Director of Education and supported the further development of the program to what was to become the award-winning "Mining, Minerals and Me" education program. This program became the basis of the Association's Educational Foundation, which led to the present organization spanning all of Arizona's natural resources in 2001.

Larry teaches at Arizona State University's College of Education. In addition, he consults widely across the country in the areas of performance-based education and alternative strategies for assessing student achievement. Active in statewide environmental education in Arizona, he has served as an educational administrator at the university and district level, as well as in the Arizona Department of Education. He is currently serving as president of the Arizona Association for Environmental Education, a statewide organization that strives to enhance the quality, scope, and effectiveness of environmental education in Arizona. Dr. McBiles served for several years on the Arizona Advisory Council for Environmental Education, including acting as Vice-Chair and Chair. During this time, he fought against the anti-environmental education forces in the state and equally as diligently for insuring that the EE License Plate Fund was used appropriately for high-quality environmental education.



Wayne C. Hazen, born in Berkeley, California, in 1917, received his B.Sc. degree in Chemistry from the University of California in 1940. He then embarked on a career in industrial chemistry. His technical contributions in solvent extraction are used worldwide in producing uranium and copper. Along the way, he learned to fly planes and helicopters; raised six children; trekked across the Himalayas, Europe, and Africa; was issued 25 patents; and founded a leading metallurgical R&D firm.

Wayne's career began in 1940 at Pan American Engineering Company, where he worked on a process to recover manganese from various ores. In 1943, he moved to Battelle Memorial Institute, where he developed an interest in surface chemistry and flotation kinetics. This led to his first patent.

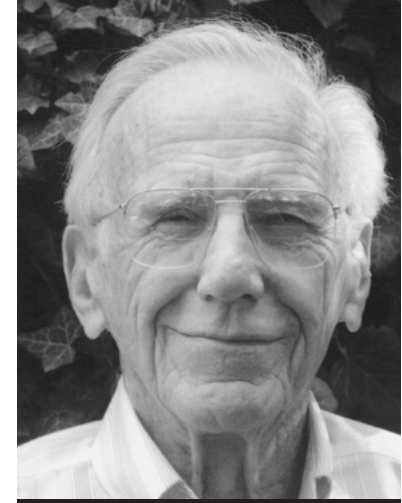
In the introduction to an interview that Wayne gave for the *Western Mining in the Twentieth Century Oral History Series*, Frank Stephens, Jr., of Battelle, remarked on Wayne's inquisitiveness and determination:

"... his staff used to spend hours telling him why he shouldn't do something before they settled down and helped him do it. Wayne was never interested in all of the reasons why something couldn't be done, he was only interested in how to do it."

After a stint at Day and Zimmerman Engineering Company from 1946 to 1947, Wayne left for Los Alamos National Laboratory, where he developed procedures and equipment for remote control processing of plutonium used in atomic weapons. He left Los Alamos in 1954 for Boulder, Colorado, where he and Gus Henrickson opened a research laboratory for Kerr-McGee Oil Industries to apply solvent extraction technology to recovering vanadium and uranium.

In 1961, Wayne and his father, a uranium consultant of some repute, started Hazen Research in Golden, Colorado. Among other notable activities, Hazen Research did the initial research and pilot plant operations for developing a copper solvent extraction process using General Mills' LIX reagent. This process, now known as the SXEW Process, was transferred to the first industrial demonstration leach circuit at the Blue Bird Mine in Miami, Arizona. Today the SXEW process is used universally throughout the world as a premiere process for the extraction of copper from oxidized copper ores.

Wayne resigned as president and CEO of Hazen Research in 1983, but continued on as Vice President and Advisor until May 2005. He was elected a Fellow of The Metallurgical Society in 1980, and, in 1999, received an Honorary Doctorate from the Colorado School of Mines. The company he founded 44 years ago now employs 95 people and is headed by his son, Nick. Wayne's extraordinarily prolific career has had a lasting effect on numerous clients, colleagues, and industries.



Wayne C. Hazen

**2005
Medal of
Merit Recipient**

