

### **Nineteenth Annual**

# American Mining Hall of Fame Awards Presentation and Banquet

December 1, 2001
The Westin La Paloma, Tucson, Arizona

**Sponsored by Mining Foundation of the Southwest** 

### **PROGRAM**

Reception ...... 6:30 p.m.

Banquet Dinner ... 7:15 p.m.

Ceremony .......... 8:45 p.m.

Welcoming Remarks: Albert J. Perry

Introduction of Head Table

and Other Honored Guests: Albert J. Perry

Awards Presentation: Martin R. Wiggins

Presentation of 2001 Inductees James Harold Courtright

From Mining's Past: Presented by Albert J. Perry

Kenyon E. Richard

Presented by J. David Lowell

Presentation of 2001 Medals of Merit: William H. Dresher

Presented by Charles G. Preble

Warren E. Fenzi

Presented by Timothy R. Snider

Presentation of 2001 Industry Mintec, Inc.

Partnership Award: Presented by Herbert E. Welhener

Presentation of 2001 Inductee: A. Dan Rovig

Presented by Martin C. Kuhn

Featured Address: A. Dan Rovig

Adjournment: Albert J. Perry



# **SPONSORS**

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## MINING FOUNDATION OF THE SOUTHWEST

The goal and purpose of the Mining Foundation of the Southwest is to promote public understanding of and education related to the mining industry. Toward this goal, the Foundation has funded a number of projects from donations and fund-raising activities.

Examples of projects funded by the Mining Foundation of the Southwest are:

- Computers for use by students in the Department of Mining and Geological Engineering at the University of Arizona and University of Sonora
- Funding a new sound system for the mining exhibits at the Arizona Historical Society Museum's Mining Hall in Tucson
- Funds for the purchase of books and publications at the libraries at the Colorado School of Mines, Mackay School of Mines and New Mexico Tech
- Funding geology—and mining—related interpretive signs at San Pedro Vista and Aspen Vista on the Mt. Lemmon Highway in Arizona
- Donation of mineral and rock collection to Arizona-Sonora Desert Museum
- Donation of books, manuscripts and journals relating to the mining industry to Arizona Geological Survey
- Donation of mineral and rock collection and old mining equipment to ASARCO's Mineral Discovery Center
- Publication of 3 volumes of History of Mining in Arizona
- New Mexico Tech to assist with development of Masters Degree in Geology
- Asociación de Mineros de Sonora to help sponsor the First Gems and Minerals Exhibition in Hermosillo, Sonora, Mexico
- Fund recruitment material for the Department of Mines and Geological Engineering at the University of Arizona
- Funds to Flandrau Science Center for preparation of self-guided tour brochures for the University of Arizona Mineral Museum

The Hall of Fame Awards Banquet serves a dual purpose in educating people about prominent persons associated with the mining industry, both present and past, and raising funds to continue projects of the Foundation.

The Mining Club was started in 1971 and the Club's Foundation began in 1983 with the first American Mining Hall of Fame Awards. The Mining Foundation of the Southwest was incorporated in 1993 by merging the Club and the Foundation. The Hall of Fame honorees, both living and deceased now number 84. The plaques which commemorate their induction are on display at the Arizona Historical Society's Museum at 949 East Second Street in Tucson.



#### **2001 INDUCTEE**

### A. DAN ROVIG

Dan Rovig is a native of Montana and a graduate of the University of Montana. He earned a B.Sc. in Mining Engineering (1961) and a M.Sc. in Mineral Dressing Engineering (1965) from Montana College of Mineral Science and Technology in Butte, Montana. After graduation he worked for W. R. Grace and Company in its vermiculite operations in Montana and the Kennecott Copper Corporation in its Western Mining Engineering and Nevada Mines Operations, as well as serving as Assistant Professor of Mineral Dressing Engineering at Montana Tech. In 1967 he moved to Tucson, Arizona as a Senior Research Engineer in Anaconda's Extractive Metallurgical Division. He returned



to Butte in 1969 where he occupied successive positions as a Metallurgical Engineer, Concentrator Superintendent and General Superintendent of Mines at Anaconda's Butte mining operations. In 1975 he was appointed General Manager, Butte Mining Operations and in 1979 moved to Denver as Senior Vice President, Minerals Operations, for the Anaconda Minerals Company.

He joined British Petroleum PLC in 1983 as Technical Director, BP Minerals International Ltd., in London, England. In 1985 he was appointed as President, Amselco Minerals Inc., BP's subsidiary in Denver, Colorado. As a result of the merger of Amselco and Kennecott in 1987, Rovig was named Vice President Gold Division, BP Minerals America, in Salt Lake City, Utah.

In 1988, he became President of Glamis Gold Inc. in Sparks, Nevada and President of the US operating subsidiaries of Glamis Gold Ltd., Vancouver B.C. From 1989 to 1997 Rovig was President, CEO and Director, Glamis Gold Ltd., and President of all Glamis operating and exploration subsidiary companies. His tenure with Glamis has been distinguished by his success in positioning Glamis as a premier intermediate gold producer that maintained profitability and growth despite gold's price downturn. Rovig retired from Glamis in 1997 but was invited to rejoin the Glamis Board of Directors in 1998 and was elected as Chairman of the Board.

Rovig, a registered Professional Engineer, has authored several professional papers and is currently serving as Chairman of the Northern Nevada Section of the Society for Mining and Metallurgy and Exploration(SME). In addition he is a member of the National Society of Professional Engineers, the Board of Directors for Apollo Gold, Inc., and several mineral trade associations.



#### **2001 INDUCTEE FROM MINING'S PAST**

### JAMES HAROLD COURTRIGHT 1908-1986

ames Harold Courtright was born outside Yakima, Washington in 1908. His introduction to mining came from working for his father as a mucker, and miner in the Cascades. He studied at Sacramento Junior College and Mackay School of Mines, University of Nevada, though he never earned a degree due to financial restraints.

In 1941, Courtright went to work at Consolidated Coppermines Corporation in Ely, Nevada, where he began his close association with Kenyon Richard, who was already an employee of that Company.



Courtright joined ASARCO in 1945. While with ASARCO, for the succeeding 34 years, Courtright contributed to the discovery, development or enlargement of many copper porphyry orebodies. These include Silverbell, Mission, San Xavier, Sacaton - Santa Cruz and Florence (Poston Butte) in Southwest United States; East Jersey, Canada; Toquepala, Quellaveco, Michiquillay, Peru; Santa Tomas, El Arco, and Concepcion del Oro in Mexico.

Courtright and Richard's refinement of leached capping interpretation and the use of the drill in primary exploration efforts were the main techniques that contributed to their exploration successes. Courtright's approach to exploration geology can best be summarized by quoting a remark he is said to have made to a prospective young geologist - "a geologist has just two tools, boot leather and a drill."

Courtright was appointed Chief Geologist for ASARCO in 1970. He retired in 1974. Harold Courtright was co-author of a number of geologic publications. He was a member of AIME, the Society of Economic Geologists, the Arizona Geological Society and the Mining Club of the Southwest.

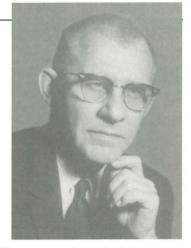


#### **2001 INDUCTEE FROM MINING'S PAST**

# KENYON E. RICHARD

enyon E. Richard was born in San Francisco in 1915. While attending the University of Nevada he excelled at track, setting a record for the high jump that stood for 25 years. Richard graduated magna cum laude from Mackay School of Mines in 1937—receiving a Bachelor of Science degree in geology.

He joined Consolidated Coppermines Corporation in Ely, Nevada and rose to the position of Chief Geologist before joining ASARCO in Tucson in 1945. He soon became Chief Geologist of that station before being elevated to the



position of Chief Geologist of ASARCO in New York in 1963, a position from which he managed the company's activities worldwide until his retirement in 1967. Subsequently he consulted for the UN and a number of major mining companies for a period of 11 years.

It was while in Tucson, in association with Harold Courtright, that the two of them perfected exploration techniques appropriate for the identification of buried porphyry copper deposits. Their efforts led to the discovery, development and/or recognition of the favorable economics of a number of world class deposits. Deposits with which Kenyon is known to have been associated include: Silver Bell, San Xavier, Sacaton- Santa Cruz, Florence (Poston Butte) and Mission in the Southwest United States; East Jersey, Canada; Toquepala, Quellaveco, Michiquillay, Toro Moca, Morochocha, Peru; Santo Tomas, El Arco, Mexico; and Tayson in the Phillipines.

Richard was a member of AIME, the Geological Society of America, the Arizona Geological Society, and he was a Charter Member of the Mining Club of the Southwest. He was author of a number of geologic publications, many in association with Harold Courtright.

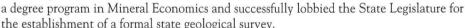


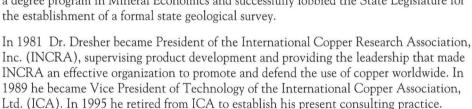
#### 2001 MEDAL OF MERIT RECIPIENT

### WILLIAM H. DRESHER

liliam Dresher was born in Philadelphia, Pennsylvania, and earned a B. S. Degree in Chemical Engineering from Drexel University in 1953 and received a Ph.D. in Metallurgy from the University of Utah in 1956. After graduation he worked for Union Carbide Corporation where, as Assistant Director of Research, he supervised R & D on the extraction and purification of uranium, vanadium, tungsten, molybdenum and asbestos.

In 1971 Dr. Dresher became the Dean of the College of Mines of the University of Arizona where he increased the College's enrollment and research income, established





Dr. Dresher has represented minerals technology in the National Research Council and was a member of Ronald Reagan's Transition Team in the field of Minerals Policy. He is a past president and current counselor for Arizona for the Mining and Metallurgical Society of America, a past member of the Board of Directors of the Minerals, Metals and Materials Society (TMS) and a Distinguished Member and a past regional counselor for the Society of Mining, Metallurgy and Exploration (SME). He has been a member of the Mining Foundation of the Southwest since 1971 where he has served on the Board of Directors, and, in 1999, as Chairman of the Hall of Fame Committee.



#### **2001 MEDAL OF MERIT RECIPIENT**

### WARREN E. FENZI

arren E. Fenzi was born in Santa Barbara, California in 1915 and joined Phelps Dodge in 1937 after earning a civil engineering degree from the California Institute of Technology. Other than time spent as a navy Seabee during World War II, he spent his entire career with this company.

Fenzi started at the Morenci Branch as an engineer when the company was beginning its massive open pit development. In 1947, he was appointed as General Superintendent at Morenci, moving to Douglas ten years later to become assistant to the General Manager of Western Operations.



He relocated to New York in 1957 as assistant to Phelps Dodge President Robert Page, but remained a westerner at heart and was known for wearing his trademark Stetson hat. In 1963, Warren Fenzi was appointed a Vice President of Phelps Dodge and became Executive Vice President in 1966. In 1975 he was named President of the company and retired from Phelps Dodge in September 1980 after 43 years with the company.

Fenzi's legacy with Phelps Dodge includes: helping to bring the Tyrone, New Mexico and Metcalf (Morenci) open pit mining operations into production; bringing the Hidalgo smelter on line; and guiding the company during the challenging operating environment of the 1970s when constantly changing environmental regulations coupled with escalating fuel costs and sharply rising interest rates made for difficult times in the copper industry.



### 2001 INDUSTRY PARTNERSHIP AWARD

### MINTEC, inc.

n 1970 A. Frederick Banfield and William L. Meyer founded MINTEC, inc., providing computer aided consulting services for geologic modeling and mine planning. By developing a sophisticated mine planning software, the mining world was provided tools to automate and assist modeling and engineering tasks faced by mining engineers and geologists.

Over the years, the software has become easier to use and is employed not only in mine evaluation, but also at operating mines for reserve calculations, and short-range and long-range planning and surveying.

MINTEC is continuing to add state-of-the-art tools to its computer software, MineSight®: a 3-D visualization and CAD program; Lerchs-Grossmann pit design algorithm; ore control and survey systems; Interactive Graphics Planner; indicator kriging; acQuire™ database management; solid/solid intersection functions; conditional simulation; state-of-the-art pit expansion functions; MineSight® Compass™; and MineSight® version 2.5.

MINTEC's principal business remains the development, expansion and support of its software. To support the more than 300 mines and consulting groups that use MineSight®, MINTEC maintains a staff of more than 40 in offices in Calgary, Alberta; Tucson, Arizona; Vancouver, British Columbia; Santiago, Chile; Lima, Peru; and Johannesburg, South Africa. MINTEC is proud of its staff and their experience. Most of the technical staff have been with the company over 10 years.

MINTEC intends to continue to provide state-of-the art software to the mining industry for at least another 30 years.





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1983 Inductee 1989 Inductee 1995 Inductee G. Robert Durham George E. Atwood Douglas C. Yearley 1984 Inductee 1990 Inductee 1996 Inductee Charles F. Barber Harry M. Conger Richard de J. Osborne 1985 Inductee 1991 Inductee 1997 Inductee George B. Munroe Kenneth J. Barr James R. Moffett 1986 Inductee 1992 Inductee 1998 Inductee John C. Duncan Charles G. Preble TS Ary 1987 Inductee 1993 Inductee 1999 Inductee Plato Malozemoff Milton H. Ward Irl F. Engelhardt 1988 Inductee 1994 Inductee 2000 Inductee

### Medal of Merit Recipients

J. Burgess Winter

Ralph J. Roberts, 1989 Victor H. Verity, 1989 John S. Livermore, 1990 George D. Argall, Jr., 1991 Arthur A. Brandt, 1992 William C. Epler, 1992 Walter E. Heinrichs, Jr., 1993 Willard C. Lacy, 1993

Simon D. Strauss

Donnell W. Agers, 1994 J. David Lowell, 1994 Ronald R. Swanson, 1994 Warren Kay Pincock, 1995 Richard W. Hutchinson, 1996 Charles L. Pillar, 1996 Hugo T. Dummett, 1997

Spencer Rowe Titley, 1997 David N. Skillings, Jr., 1998 José Rubén Velasco Rodríguez, 1998 Paul S. Allen, 1999 William C. Peters, 1999 Leonard Harris, 2000 Pedro Sánchez-Mejorada, 2000

Ronald C. Cambre

### Industry Partnership Award

Caterpillar, Inc. - Glen A. Barton, 1995
Amigos (Arizona Mining & Industry Gets Our Support), 1996
Colorado School of Mines, 1997
Stephen D. Bechtel, Jr. and Bechtel Corporation, 1998
Mineral Information Institute, 1999
Modular Mining Systems, Inc., 2000



### 1983-2000 Inductees from Mining's Past

Maxie L. Anderson 1934-1983

> Bert S. Butler 1877-1960

Nellie Cashman 1849-1925

Louis S. Cates 1881-1959

William Andrews Clark 1839-1925

James Colquhoun 1857-1954

John Van Nostrand Dorr 1872-1962

> James Douglas 1837-1918

James Stewart Douglas 1868-1949

Charles F. Fogerty

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

Jorge Larrea Ortega 1912-1999

Charles Debrille Poston 1825-1902

Frederick Leslie Ransome 1868-1935

Rossiter W. Raymond 1840-1918

Robert H. Richards 1844-1945

Thomas A. Rickard 1864-1953

Louis D. Ricketts 1859-1940

> 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

Arthur Redman Wilfley 1860-1927

Edward H. Wisser 1895-1970



# MINING FOUNDATION OF THE SOUTHWEST

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 and printing this evening's programs. Modular has provided this contribution for many years.



# MINING FOUNDATION OF THE SOUTHWEST



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