

SME Mineral Processing & Extractive Metallurgy Handbook

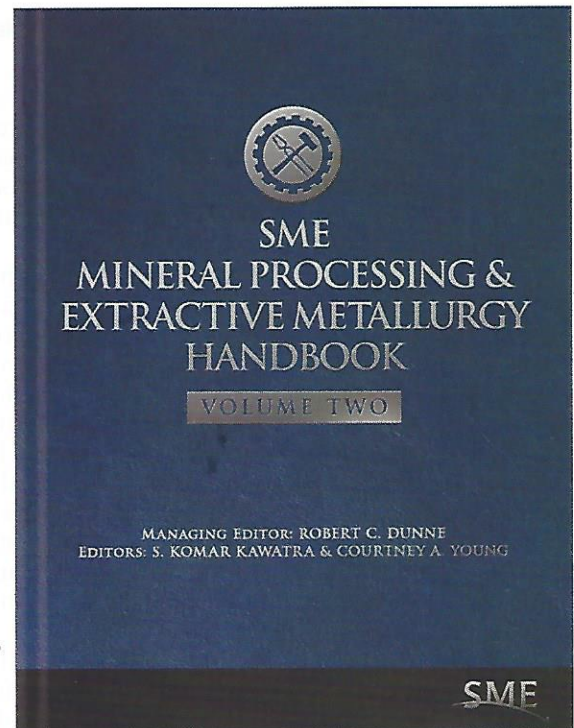
2019, Robert C. Dunne, managing editor; S. Komar Kawatra and Courtney A. Young, editors; published by SME, 12999 E. Adam Aircraft Cir., Englewood, CO 80112, USA, www.smenet.org/store, email books@smenet.org, phone 303-948-4237, 800-763-3132, 2,312 pp., hardbound in 2 volumes, ISBN 978-0-87335-385-4, \$349 member, \$299 student member, \$575 list. Also available as an eBook from SME.

This landmark publication distills the body of knowledge that characterizes mineral processing and extractive metallurgy as disciplinary fields. It will inspire and inform current and future generations of minerals and metallurgy professionals.

Mineral processing and extractive metallurgy are atypical disciplines, requiring a combination of knowledge, experience and art. Investing in this trove of valuable information is a must for all those involved in the industry — students, engineers, mill managers and operators.

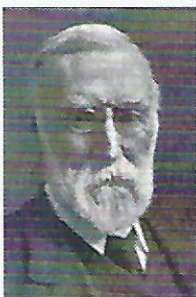
More than 192 internationally recognized experts have contributed to the handbook's 128 thought-provoking chapters that examine nearly every aspect of mineral processing and extractive metallurgy. This inclusive reference addresses the magnitude of traditional industry topics and also addresses the new technologies and important cultural and social issues that are important today.

Contents include chapters on mineral characterization and analysis, management and reporting, comminution, classification and washing, transport and storage, physical separations, flotation, solid and liquid separation, disposal, hydrometallurgy, pyrometallurgy and the processing of selected metals, minerals, and materials. ■



The people behind the awards

Over the next few months, SME will briefly profile the engineers and miners who are remembered by the AIME-founded awards presented to SME members.



DOUGLAS

JAMES S. DOUGLAS was born in Quebec, Canada in 1837. He studied medicine at the University of Edinburgh but, because of his interest in chemistry, he became involved in metallurgy with Thomas Henry Hunt. Douglas and Hunt are credited with developing the first commercial, electrolytic copper refining process.

As a consultant to Phelps Dodge (P-D), Douglas investigated the Arizona property of the Detroit Copper Co. in Morenci. He reported in favor of the company, and P-D agreed to finance the development of the Morenci Mine. He also presented the company with an option to purchase the Atlanta claim in Bisbee. Two years later, P-D purchased the Copper Queen Mine and, on Aug. 10, 1885, the Copper Queen Consolidated Mining Co. was formed. P-D moved from an import-export company to a major mining company. Douglas served as manager and director of the Copper Queen until the company changed its name to Phelps Dodge Corp. in 1917. He then became president and, later, chairman of the board.

During World War I, Douglas volunteered his services to the Red Cross in France, supervising its stores for the entire Western Front. For this, he received the Chevalier of the Legion of Honor from the French government. In 1916, Douglas established the James Douglas Library Fund endowment to support AIME's library. The endowment now supports the libraries of AIME's four constituent societies.

On the 100th anniversary of his death, July 25, 2018, the city of Nacozari de Garcia, Sonora, Mexico designated its Municipal Civic Auditorium as the James Douglas Auditorium as a permanent tribute to the memory of the founder of modern Nacozari.

The James Douglas Gold Medal was established in 1922. The award recognizes distinguished achievement in nonferrous metallurgy, including the beneficiation of ores and the alloying and utilization of nonferrous metals. Twice president of AIME, he was also an AIME Honorary Member. ■