ARTICLES OF INCORPORATION

OF

THE METALLURGICAL SOCIETY, INC.

The undersigned, natural persons of full age, desiring to form a nonprofit corporation under the Nonprofit Corporation Law of the Commonwealth of Pennsylvania, do hereby certify in compliance with the requirements of 15 PA CONS. STAT. Section 7316:

FIRST. The name of the corporation shall be THE METALLURGICAL SOCIETY, INC.

SECOND. The place in the Commonwealth of Pennsylvania where the registered offices of the Corporation are to be located is 420 Commonwealth Drive, Warrendale, Pennsylvania 15086. (02)

THIRD. The Corporation is organized and shall be operated exclusively for the following public charitable, educational, and scientific purposes:

1. To provide an intellectual environment that advances the interests of professions associated with minerals and metals extraction, fabrication and materials application industries. In the accomplishment of this objective, the Corporation will:

   (a) Provide a forum for interchange of ideas between all segments;

   (b) Serve as a repository of knowledge;

   (c) Provide access to knowledge through programming;

   (d) Disseminate knowledge through publication;
(e) Encourage and support practitioners;

(f) Support education and orientation of new entrants;

(g) Encourage advancement of the state of understanding;

(h) Support professionalism and ethics; and

(i) Stimulate a sense of unity in these professions.

2. To acquire or receive from any persons, firms, associations, corporations, trusts, or foundations by deed, gift, purchase, bequest, devise, or otherwise, cash, securities, and other property, real and personal, and to hold, administer, manage, invest, reinvest; and disburse the principal and income thereof solely for the purposes stated in these Articles of Incorporation; and

3. To do whatever is deemed necessary, useful, advisable, or conductive, either directly or indirectly, to effectuate the purposes of the Corporation, including the exercise of all other authority enjoyed by corporations generally by virtue of the provisions of the Nonprofit Corporation Law of the Commonwealth of Pennsylvania.

The Corporation does not contemplate pecuniary gain or profit, incidental or otherwise. The Corporation shall carry on only such activities as are consonant with the purposes set forth in this Article THIRD. No part of the net earnings of the Corporation shall inure to the benefit of any Incorporator, Member, Director, or officer of the Corporation, or of any private individual, except that the Corporation is authorized and empowered to pay reasonable compensation for services rendered and to make payments and distributions in furtherance of the purposes set forth in this Article THIRD. No substantial part of the activities of the Corporation shall consist of carrying on propaganda or otherwise attempting to influence legislation, and the Corporation shall not participate in, or intervene in (including the publishing or distributing of statements),
any political campaign on behalf of or in opposition to any candidate for public office.

Notwithstanding any other provision of these Articles of Incorporation, the Corporation shall not conduct or carry on any activities not permitted to be conducted or carried on (a) by an organization exempt under Section 501(c)(3) of the Internal Revenue Code, or (b) by a corporation, contributions to which are deductible under Section 170(c)(2) of the Internal Revenue Code.

It is intended that the Corporation shall have the status of an organization (a) which is exempt from federal income tax under Section 501(c)(3) of the Internal Revenue Code and which is other than a private foundation within the meaning of Section 509(a) of the Internal Revenue Code, (b) to which contributions are deductible for federal income tax purposes under Section 170(C)(2) of the Internal Revenue Code, (c) to which bequests are deductible for federal estate tax purposes under Section 2055(a)(2) of the Internal Revenue Code, and (d) to which gifts are deductible for federal gift tax purposes under Section 2522(a)(2) of the Internal Revenue Code. These Articles of Incorporation shall be construed, and all authority and activities of the Corporation shall be limited, accordingly.

FOURTH. The Corporation may be dissolved by the Members. Upon the dissolution of the Corporation, the Directors shall, after paying or making provision for the payment of all liabilities of the Corporation, distribute all of the assets of the Corporation to such organization or organizations organized and operated exclusively for charitable, educational, or scientific purposes as shall at the time qualify as an organization or
organizations exempt from federal income tax under Section 501(c)(3) of the Internal Revenue Code, as the Directors shall determine.

FIFTH. The following persons shall serve as the initial Directors of the Corporation until the first annual meeting or other meeting called to elect Directors:

ELLIS D. VERINK, JR.
MILTON E. WADSWORTH
PETER TARASSOFF
GEORGE S. ANSELL
ALAN D. ZUNKEL
RONALD GIBALA
WILLIAM G. DAVENPORT
CHRISTOPHER L. MAGEE
ROGER N. WRIGHT
CARL H. COTTERILL
WILLIAM H. DRESHER
GARY SHIFLET
FRANK V. NOLFI, JR.
HARRIS L. MARCUS
ROBERT W. BARTLETT
NEIL D. PATON
I. MELVIN BERNSTEIN
AMIT K. GHOSH

In the event of the death or resignation of a Director, the remaining Directors shall be authorized to designate a successor.

SIXTH. The qualifications for membership in the Corporation shall be provided in the Bylaws of the Corporation.

SEVENTH. The Corporation is organized upon a nonstock basis and shall have perpetual existence.

EIGHTH. All references in these Articles of Incorporation to Sections of the Internal Revenue Code shall be considered references to the Internal Revenue Code of 1954, as from time to time amended, and to the corresponding provisions of any similar law subsequently enacted, and to all regulations issued under those Sections and provisions.
NINTH. The Incorporators constitute a majority of the members
of the committee authorized to incorporate The Metallurgical Society of the
American Institute of Mining, Metallurgical, and Petroleum Engineers by the
requisite vote required by the organic law of the association for the
amendment of such organic law.

IN WITNESS WHEREOF, we have subscribed our names at Warrendale,
Pennsylvania this 30th day of November, 1984.

Name: Charles E. Baudgarter
Address: 904 Lorain County Bank Bldg.
Elyria, Ohio 44035

Name: Kurt A. Breunig
Address: 904 Lorain County Bank Bldg.
Elyria, Ohio 44035

Name: Melvin Bernstein
Address: Carnegie-Mellon University
Schenley Park, Pittsburgh, PA 15213

Name: Alexander R. Scott
Address: 420 Commonwealth Drive
Warrendale, Pennsylvania 15086

Name: Peter De Luca
Address: 420 Commonwealth Drive
Warrendale, PA 15086
In compliance with the requirements of 15 Pa. S. §7905 (relating to articles of amendment), the undersigned nonprofit corporation, desiring to amend its Articles, does hereby certify that:

1. The name of the corporation is:
   The Metallurgical Society, Inc.

2. The address of its registered office in this Commonwealth is (the Department of State is hereby authorized to correct the following statement to conform to the records of the Department):
   420 Commonwealth Drive
   Warrendale, Pennsylvania 15086

3. The statute by or under which it was incorporated is:
   15 PA Cons. Stat. Section 7316

4. The date of its incorporation is December 3, 1984

5. (Check, and if appropriate, complete one of the following):
   □ The amendment shall be effective upon filing these Articles of Amendment in the Department of State.
   □ The amendment shall be effective on:
     __________________________ at __________________________
     (DATE) (HOUR)

6. (Check one of the following):
   □ The amendment was adopted by the members pursuant to 15 Pa. S. §7904(a).
   □ The amendment was adopted by the board of directors pursuant to 15 Pa. S. §7904(b).

7. The amendment adopted by the corporation set forth in full is as follows:
   Be it resolved that Article First of the Articles of Incorporation of The Metallurgical Society, Inc. be and are hereby amended to read as follows: "First. The name of the Corporation shall be The Minerals, Metals and Materials Society, Inc."
IN TESTIMONY WHEREOF, the undersigned corporation has caused these Articles of Amendment to be signed by a duly authorized officer and its corporate seal, duly attested by another such officer to be hereunto affixed this 7th day of December, 1989.

The Metallurgical Society

(NAME OF CORPORATION)

By:

Bob Bartlett

(SIGNATURE)

President, Robert Bartlett

(TITLE PRESIDENT VICE PRESIDENT ETC.)

Attest:

(ATTRIBUTE)

(SIGNATURE)

Secretary

(TITLE SECRETARY ASSISTANT SECRETARY ETC.)

CORPORATE SEAL

INSTRUCTIONS FOR COMPLETION OF FORM:

A. Any necessary copies of Form DSCB: 17.2 (Consent to Appropriation of Name) or Form DSCB: 17.3 (Consent to Use Similar Name) shall accompany Articles of Amendment effecting a change of name.

B. Any necessary governmental approvals shall accompany this form.

C. If the action was authorized by a body other than the board of directors Paragraph 6 should be modified accordingly.

D. 15 Pa. S. §799.1(c) requires that the corporation shall advertise its intention to file or the filing of Articles of Amendment. Proofs of publication of such advertising should not be delivered to the Department but should be filed with minutes of the corporation.