

## BY-LAWS OF OFM RESEARCH, A NOT-FOR-PROFIT CORPORATION

### ARTICLE I. ORGANIZATION

1. The name of the corporation shall be OFM Research.
2. The organization shall have a seal which bears the name of the corporation with three canine paw prints on the line below.-
3. The corporation may at its pleasure by a vote of the Board of Directors change its name.

### ARTICLE II. PURPOSES

The general purpose of the corporation is to conduct public interest scientific research funded by grants from the National Science Foundation and other public sources and from private donations and to distribute research findings to the scientific community and interested members of the public. More specifically, the corporation's purpose is:

- (1) To engage in scientific research into the nature of the energetic (thermodynamic) and material properties of minerals, melts, and other earth materials.
- (2) To construct thermodynamic databases for the common rock-forming mineral solutions.
- (3) To write and publish research findings in non-discriminatory national and international scientific and trade journals, and to communicate these findings to scientific societies and to the interested public.
- (4) To distribute research findings without discrimination to the Earth Sciences community and to the interested public in traditional papers, electronic documents and as computational software for simulating natural processes.
- (5) To engage in any other related lawful business activity permitted under the Washington Nonprofit Corporation Act, RCW Chapter 24.03 and section 501(C)(3) of the Internal Revenue Code.

### ARTICLE III. MEMBERSHIP

There will be no members of the corporation. Affairs of the Corporation shall be managed by a Board of Directors.

### ARTICLE IV. MEETINGS

The annual meeting of the corporation shall be held on the 15 day of July each and every year except if such day be a legal holiday, then and in that event, the Board of Directors shall fix the day but it shall be not more than two weeks from the date fixed by these By-Laws.

The Secretary shall cause to be mailed to every Director notice telling the time and place of such annual meeting.

The presence of not less than 40% of the Directors shall constitute a quorum and shall be necessary to conduct the business of the corporation; but a lesser percentage may adjourn the meeting for a period of not more than 30 days from the date scheduled by these By-Laws and the Secretary shall cause a notice of this scheduled meeting to be sent to all those Directors who were not present at the meeting originally called. A quorum as herein before set

forth shall be required at any adjourned meeting.

Special meetings of this corporation may be called by the President when he deems it for the best interest of the corporation. Notice of such meeting shall be mailed to all Directors at least ten (10) days before the scheduled date set for such special meeting. Such notice shall state that such meeting has been called, the business to be transacted at such meeting and by whom it was called. At the request of 40% of the Directors, the President shall cause a special meeting to be called but such request must be made in writing at least ten (10) days before the requested schedule date.

No other business but that specified in the notice may be transacted at such special meeting without the unanimous consent of all present at such meeting.

#### ARTICLE V. VOTING

At all meetings all votes shall be by voice of Directors present and by absentee ballots of Directors unable to attend. Motions will be passed by majority vote unless otherwise specified herein. Officers will be elected annually.

#### ARTICLE VI. ORDER OF BUSINESS

1. Roll Call.
2. Reading of the Minutes of the preceding meeting.
3. Reports of Committees.
4. Reports of Officers,
5. Old and Unfinished Business.
6. New Business.

#### ARTICLE VII. BOARD OF DIRECTORS

The business of this corporation shall be managed by a Board of Directors consisting of five (5) earth-materials scientists. At least one of the directors shall be resident of the State of Washington and a citizen of the United States.

The directors shall serve for terms of their choosing.

The Board of Directors shall have control and management of the affairs and business of this corporation. Such Board of Directors shall only act in the name of the organization when it shall be regularly convened by its Chairman after due notice to all Directors of such meeting.

Forty (40%) percent of the members of the Board of Directors shall constitute a quorum and the meetings of the Board of Directors shall be regularly held on July 15th of each year.

Each Director shall have one vote and such voting may be done by proxy.

The Board of Directors may make rules and regulations covering its meetings as it may in its discretion determine necessary.

Vacancies in the Board of Directors shall be filled by a vote of the majority of the remaining members of the Board of Directors for the balance of the year.

The President of the corporation by virtue of his office shall be Chairman of the Board of Directors.

The Board of Directors shall select from one of its members a President, Vice-President,

Secretary and Treasurer.

A Director may be removed when sufficient cause exists for such removal. The Board of Directors may entertain charges against any director. A director may be represented by counsel upon any removal hearing. The Board of Directors shall adopt such rules for this hearing as it may in its discretion consider necessary for the best interests of the corporation.

The initial Board of Directors of the corporation shall be as follows (resumes attached):

Director #1: Denton S. Ebel,  
Director #2: Mark S. Ghiorso  
Director #3: Lisa S. Hardy  
Director #4: Peter C. Lichtner  
Director #5: Richard O. Sack

#### ARTICLE VIII. OFFICERS

The initial officers of the corporation shall be as follows:

President: Richard O. Sack  
Vice President: Mark S. Ghiorso  
Secretary: Mark S. Ghiorso  
Treasurer: Richard O. Sack

The President shall preside at all annual meetings.

He shall by virtue of his office be Chairman of the Board of Directors.

He shall present at each annual meeting of the corporation an annual report of the work of the corporation.

He shall appoint all committees, temporary or permanent.

He shall see all books, reports, and certificates required by law are properly kept or filed.

He shall be one of the officers who may sign checks or drafts of the corporation.

He shall have such powers as may be reasonably construed as belonging to the chief executive of any corporation.

The Vice President shall have the powers and authority and perform all of the functions and duties of the President in the absence of the President or his inability for any reason to exercise such powers and functions or perform such duties.

The Secretary shall keep the minutes of meetings of the corporation, have charge of such books and papers as the Directors may designate, and perform all duties incident to the office of Secretary. The Secretary shall compile and keep up to date at the principal office of the corporation a complete list of Members and their registered mailing addresses. This list shall be open to inspection by Members and other persons lawfully entitled to inspect the same during regular business hours.

The Treasurer shall have responsibility for corporation funds and shall be responsible for keeping full and accurate accounts of all receipts and disbursements in books belonging to the corporation. He shall be responsible for the deposits of all monies and other valuable effects in the name and to the credit of the corporation in such depositories as may from time to time be designated by the President.

No officer shall for reason of his office be entitled to receive any salary or compensation, but nothing herein shall be construed to prevent an officer or director from receiving any

compensation from the corporation for duties other than as a director or officer.

#### ARTICLE IX. SALARIES

The Board of Directors shall hire and fix the compensation of any and all employees which they in their discretion may determine to be necessary for the conduct of the business of the corporation.

#### ARTICLE X. COMMITTEES

All committees of this corporation shall be appointed by the Board of Directors and their term of office shall be for a period of one year or less if sooner terminated by the action of the Board of Directors.

#### ARTICLE XI. INDEMNIFICATION OF OFFICERS AND DIRECTORS

The Corporation shall indemnify every Officer and Director, and his or her heirs, executors and administrators as provided in the Articles of Incorporation.

#### ARTICLE XII. AMENDMENTS

Amendments to these Bylaws for the administration of the Corporation, and for other purposes not inconsistent with the Washington State Nonprofit Corporation Act (the "Act") or with the intent of the Articles of Incorporation, shall be adopted by the Corporation by concurrence of three quarters (75%) of Directors, and any regular or special meeting. Notice of the time, place and purpose of such meeting shall be delivered to each Member at least ten (10) days prior to such meeting. Notwithstanding the foregoing, a majority of the Officers and Directors shall be entitled to alter, amend or repeal these By-Laws; provided that such authority may be revoked by a majority vote of the Members.

#### ARTICLE XIII. CONFLICT WITH ARTICLES OF INCORPORATION OR LAW

These By-Laws are intended to comply with and supplement the requirements of the Articles of Incorporation. If any of these By-Laws conflict with the provisions of the Articles of Incorporation, the provisions of the Act and the Articles of Incorporation shall apply.

#### ARTICLE XIV. NONPROFIT CORPORATION

The Corporation is not organized for profit. No Director, Officer or person from whom the Corporation may receive any property or funds shall receive or shall be lawfully entitled to receive any pecuniary profit from the operations of the Corporation, and in no event shall part of the funds or assets of the Corporation be paid as salary or compensation to, or distributed to, or inure to the benefit of the Director or Officers. The foregoing, however, shall neither prevent nor restrict the following: (1) reasonable compensation may be paid to any Director while acting as an agent or employee of the Corporation, and (2) and Director may, from time to time, be reimbursed for his actual and reasonable expenses incurred in connection with the administration of the affairs of the Corporation.