DIERS Research Capabilities and Project Proposal Invitation Letter

The Design Institute for Emergency Relief Systems (DIERS) was originally formed to support cooperative safety related research projects that would be too costly for a single company to fund. Cooperatively funded research projects executed by DIERS under the auspices of the American Institute of Chemical Engineers (AIChE) 503(3b) not for profit structure reduces project cost and has the advantage of multi-company technology support. The reorganization of DIERS as a Technical Entity of AIChE with the new bylaws (abstracted and summarized below) provides a convenient technical, supervisory, and management structure for cooperative research.

The DIERS organization is seeking suggestions and proposals for both unfunded and funded safety related research projects from the membership and industry. Areas of DIERS interest and expertise are emergency relief system design for process vessels involving runaway reaction and two-phase vapor-liquid flow. The Project Proposal Form should be used to submit suggestions and proposals. Submitters should send the completed form with their contact information to the all of the listed contacts. Submitters will be contacted to discuss the idea or proposal and the potential source of funding for those proposals requiring contract research.

Ideas and proposals for safety related DIERS research projects presently being considered can be reviewed at the DIERS RESEARCH link. Volunteer Champions (leaders) and Committee Members for each research project are also being solicited by the project research contacts.

DIERS BYLAWS

The mission of DIERS is to advance the practice of designing emergency relief systems, particularly for two-phase releases, so as to reduce the frequency and potential consequences of overpressure incidents.

The objectives of DIERS, related to the technology of relief system design are:

- Maintain and upgrade the DIERS design methodology,
- Promote the development of new techniques,
- Provide a forum for discussion and a mechanism for exchange of information regarding specific improvements, modifications, clarifications or corrections,
- Provide a mechanism for ongoing cooperative research and development.

PROJECT SPONSORS

General

DIERS shall have two classes of sponsors: Corporate and Institutional. The Operating Committee of DIERS shall establish sponsor fees, levels, and parameters, which shall be

approved by the DIERS Managing Board. Sponsors may designate their sponsorship fees as temporarily restricted funds as defined by the Financial Accounting Standards Board.

<u>Qualification of Corporate Project Sponsors</u>

Any for-profit corporation, company, or partnership, located anywhere, having an interest in the design of emergency relief systems may become a Corporate Sponsor of DIERS as a whole or of a specified project through submission of required fees to AIChE and through designation of Special Project Committee members for each sponsored project. Corporate Sponsor benefits begin immediately upon receipt of the payment by AIChE and extend through the end of the calendar year for which such payment is received. Corporate Sponsorship may be terminated through a written request to the Operating Committee or DIERS Staff Director to withdraw, through failure to remit required fees, or through failure to comply with the Corporate Sponsorship Agreement.

Benefits of Corporate Project Sponsorship

Corporate Project Sponsors are entitled, but not limited, to:

- Direct the activities of projects they sponsor
- Receive in-depth learning from the projects they sponsored in advance
- Individual memberships in DIERS
- Prominent recognition in DIERS promotional media and at DIERS events
- Annual Report detailing how aggregate sponsorship funds were utilized.

Final results of a project sponsored and funded by Corporate Sponsors will be restricted to those Corporate Sponsors plus Institutional Sponsors, if any, for one (1) year, unless the Corporate Sponsors and any Institutional Sponsors agree unanimously to earlier release.

Qualification of Institutional Project Sponsors

Any not-for-profit institution, professional society, foundation, or entity, located anywhere, having an interest in the design of emergency relief systems may become an Institutional Sponsor of DIERS through the execution of an Institutional Sponsor Agreement by a responsible official and payment of applicable fees. Institutional Sponsorship may be terminated through a written request to the Operating Committee or DIERS Staff Director to withdraw, through failure to remit required fees, or through failure to comply with the Institutional Sponsor Agreement.

Benefits of Institutional Project Sponsorship

Institutional Project Sponsors are entitled, but not limited, to:

- Direct the activities of projects they sponsor
- Receive in-depth learning from the projects they sponsored in advance
- Individual memberships in DIERS
- Prominent recognition in DIERS promotional media and at DIERS events
- Annual Report detailing how aggregate sponsorship funds were utilized.

Final results of a project sponsored and funded by Institutional Sponsors will be restricted to those Institutional Sponsors plus Corporate Sponsors, if any, for one (1) year, unless the Institutional Sponsors and any Corporate Sponsors agree unanimously to earlier release. In the case of Institutional Sponsors which are organizations having individual and corporate members, the benefits of Institutional Sponsorship do not extend to the individual or corporate members of that organization.

Project Committees

The Operating Committee shall create committees to execute General and Special Projects. The Operating Committee shall sunset Project Committees upon project completion, determination of inactivity, or when deemed to be in the best interest of DIERS or AIChE.

General Project Committees will be formed by the Operating Committee to address topics and activities of general interest to the membership of DIERS, which shall be financed from general DIERS funds, by grants, or by a combination of DIERS general funds and grants. The Operating Committee will make its best efforts to include a broad range of DIERS members in General Project Committees, assure that composition of each General Project Committee is balanced regarding industrial, consultant, academic, government, and other sectors, and avoid multiple committee representatives from the same company or organization. Except in cases where grants provide partial or total funding for General Project Committee Projects, expenses of General Project Committees are expected to be modest, and these expenses shall be paid from DIERS general funds.

Special Project Committees will be formed by the Operating Committee to address projects and activities for which separate corporate and/or institutional funding is obtained, or which are financed by a combination of grants and Corporate Sponsor and/or Institutional Sponsor funding. In such cases, each funding organization for the project or activity shall provide one representative to the committee. If agreed to by a majority of the funding companies, committee representatives from outside the group of funding organizations may be invited to join the committee as either voting members or observers.

Each Project Committee shall select a Chair and any other roles deemed necessary. Chairs and other roles shall be elected by a majority vote of the Project Committee. Project Committees will meet as often as necessary to meet their goals and objectives, but no less than once per year. Project Chairs shall preferably be Senior Members or Fellows of AIChE.

Reports issued by General Project Committees shall be made available immediately to the DIERS membership. Reports issued by Special Project Committees shall be made available to the DIERS membership no later than one year after issuance to the project sponsors. Each Project Committee shall be dissolved when either:

- the goals and objectives of the committee have been met;
- in the case of a General Project Committee:
 - o if the number of committee members is reduced to 3 or fewer, or
 - o if the Operating Committee decides to dissolve that General Project Committee;
- in the case of a Special Project Committee:
 - if funds provided by the funding companies are no longer sufficient to sustain the committee's work, or
 - o if the Special Project Committee decides to terminate its work; or
 - failing any action of the Special Project Committee for two years, the
 Operating Committee may dissolve it;
- the Managing Board decides by majority to dissolve the Project Committee due to inappropriate conduct on the part of the Committee or Committee members including but not limited to conflict of interest, anti-trust, financial mismanagement, or intellectual property violation.