MEMORANDUM OF UNDERSTANDING
Center for Advanced Processing and Packaging Studies

North Carolina State University, University of California, Davis, The Ohio State University

This Memorandum of Understanding (MOU) is effective this 16th day of April 2003 between North Carolina State University, the University of California, Davis, and The Ohio State University Research Foundation.

WHEREAS, North Carolina State University (hereinafter referred to as "NCSU"), The Regents of the University of California, on behalf of its University of California, Davis (hereinafter referred to as "UCD") and The Ohio State University Research Foundation (hereinafter referred to as "OSU") intend to join together in a cooperative effort to support the Center for Advanced Processing and Packaging Studies (hereinafter referred to as "CENTER"). All of the universities mentioned above shall be hereinafter referred to collectively as "INSTITUTIONS, or Sites".

WHEREAS, the activities of the CENTER are funded by 1) the National Science Foundation (hereinafter referred to as "NSF") 2) Industrial Members (hereinafter referred to as "MEMBERS") and 3) other funds that may be received from time to time.

WHEREAS, INSTITUTIONS desire to formalize certain agreements between them with respect to the subject matter contained herein.

NOW THEREFORE, for and in consideration of the mutual promises and covenants herein contained and intending to be legally bound, INSTITUTIONS hereto agree as follows:

1. Center Governance

   a. The CENTER will be governed by a common set of Bylaws (a copy of which is attached as Attachment A). The Bylaws may be modified upon the mutual agreement of the INSTITUTIONS. The CENTER will share a common Industrial Advisory Board (hereinafter referred to as "IAB"), which recommends policy and project funding for the CENTER.

   b. The Managing Directors, who reside at OSU, provide overall management of the CENTER. The Managing Directors coordinate CENTER information, preside at the IAB Meetings, and oversee the CENTER operation at a specific site. Each Institution shall have a Site Director. The Site Directors coordinate the CENTER funded research at their respective sites and interact with the IAB to identify key technology areas and establish long-range goals and short-range planning procedures necessary for an overall research program. Each Site Director shall provide to the Managing Director regular reports of research activities and programmatic and fiscal matters associated with CENTER.

   c. OSU will be the LEAD INSTITUTION, and will be responsible for negotiating Membership Agreements for MEMBERS as well as collecting and administering membership dues from MEMBERS. The LEAD INSTITUTION will also be responsible or disbursing funds to projects at all INSTITUTIONS (or other non-CAPPS institutions) that are approved by the IAB, as outlined in Section 3 below. The LEAD INSTITUTION may be changed upon mutual agreement by INSTITUTIONS and a modification to this Agreement. The former LEAD INSTITUTION will transfer unallocated membership dues to the new LEAD INSTITUTION for administration.
Center Funding

The IAB shall vote on the allocation of funds for each CENTER project. Additional membership dues attributed to addition of a new CENTER Site will be retained for projects at that site for a two-year period. With the exception of new CENTER Sites, all other CENTER sites will fund new projects in accordance with the semi-annual selection by the IAB of research projects to be funded by the virtually pooled corporate membership fees collected by the LEAD INSTITUTION.

Cross-Funding of Research

The transfer of funds to support research projects selected by the IAB at institutions other than the LEAD INSTITUTION will be made via a subcontract from the LEAD INSTITUTION.

Ownership and Administration of Intellectual Property.

a. Inventions and patents issuing thereon, made during the course of a research project funded by the CENTER by a single investigator or multiple investigators from one Institution will be owned solely by the investigators' home Institution.

b. The ownership of inventions and patents issuing thereon, made during the course of a research project funded by the CENTER by multiple investigators from different Institutions will be jointly owned by the home Institutions of the respective investigators.

c. Inventions made with support from the National Science Foundation shall be subject to the provisions of 37 CFR, Part 401.

d. Investigators who make an invention, discovery or improvement, or develop software during the course of a project funded by the CENTER shall disclose promptly such invention to the Site Director and the Managing Director and/or the appropriate policy committee of the Institution with which the investigator is affiliated. In the case of an invention owned solely by one Institution, that Institution shall be responsible for managing the invention. In the case of inventions owned jointly by two or more Institutions, once an invention disclosure concerning a jointly owned invention is filed, the participating Institutions will decide on a case-by-case basis which Institution will manage the technology, including patent filing, marketing and negotiation of all relevant agreements.

e. Taking into account any preexisting obligations, all intellectual property, including invention disclosures, filed and assigned patents, as well as copyrights, (excluding copyrights in academic works of authorship such as publications, theses, dissertations) will be marketed to industry. Industrial MEMBERS of the CENTER will be contacted about licensing such intellectual property as governed by the rules of the National Science Foundation Industry/University Cooperative Research Centers.

f. Funds for filing patents will come from a combination of university resources, industrial funds, or other funds, as available, in accordance with INSTITUTION policy.

g. Separate agreements will be developed, on a case-by-case basis, to cover CENTER-funded project inventions conceived jointly between INSTITUTIONS and inventors from other (non-CENTER) universities, federal agencies, industry or other organizations.

h. The Managing Director and Site Directors will encourage investigators and students to file invention disclosures. Appropriate record-keeping practices and information on the maintenance of proper legal records of ideas and inventions will be promoted. The patenting and marketing progress of invention disclosures generated by all participating CENTER personnel will be closely monitored by the appropriate INSTITUTIONS affiliated
Technology Transfer Offices in conjunction with the Site Directors to ensure timely knowledge transfer.

i. Publication of results of the research conducted under the auspices of the CENTER is encouraged and will not be delayed other than as reasonably necessary to timely file a patent application.

IN WITNESS WHEREOF, the parties hereto have caused this MOU to be duly executed by their duly authorized officers as of the day and year set forth next to each signature.

North Carolina State University

[Signature]

Name: Richard Best
Title: Associate Director, Sponsored
Date: 4/10/03

The Regents of the University of California
on behalf of the University of California, Davis

[Signature]

Name: Ahmad Hakim-Eslahi, Ph.D., J.D.
Title: Director of Sponsored Programs
Date: 4/18/03

The Ohio State University Research Foundation

[Signature]

Name: James F. Ball
Title: Associate Director
The Ohio State University Research Foundation