

SECURITIES AND EXCHANGE COMMISSION  
 Washington, D.C. 20549

-----  
 FORM S-3  
 REGISTRATION STATEMENT  
 UNDER  
 THE SECURITIES ACT OF 1933  
 -----

ADVANCED POLYMER SYSTEMS, INC.  
 (Exact name of registrant as specified in its charter)

DELAWARE 94-2875566  
 (State or other jurisdiction of (I.R.S. employer identification  
 incorporation or organization) number)

3696 HAVEN AVENUE, REDWOOD CITY, CALIFORNIA 94063 (415) 366-2626  
 (Address, including zip code, and telephone number, including  
 area code, of registrant's principal executive offices)

MICHAEL P.J. O'CONNELL  
 3696 HAVEN AVENUE, REDWOOD CITY, CALIFORNIA 94063  
 (Name, address, including zip code, and telephone number, including area code,  
 of agent for service)

with copies of all orders, notices and communications to:  
 Richard A. Peers  
 Heller, Ehrman, White & McAuliffe  
 525 University Avenue, Palo Alto, California 94301 (415) 324-7000

-----  
 APPROXIMATE DATE OF COMMENCEMENT OF PROPOSED SALE TO THE PUBLIC:  
 As soon as practicable after the Registration Statement becomes effective.

-----  
 If the only securities being registered on this Form are being offered pursuant  
 to dividend or interest reinvestment plans, please check the following box. / /

-----  
 If any of the securities being registered on this Form are to be offered on a  
 delayed or continuous basis pursuant to Rule 415 under the Securities Act of  
 1933, other than securities offered only in connection with dividend or interest  
 reinvestment plans, check the following box. /x/

-----  
 CALCULATION OF REGISTRATION FEE

| TITLE OF EACH CLASS OF<br>SECURITIES TO BE REGISTERED | AMOUNT TO<br>BE REGISTERED | PROPOSED MAXIMUM<br>OFFERING PRICE<br>PER SHARE | PROPOSED MAXIMUM<br>AGGREGATE OFFERING<br>PRICE | AMOUNT OF<br>REGISTRATION FEE |
|---|----------------------------|---|---|-------------------------------|
| Common Stock, \$.01 par value                         | 740,950                    | \$7.75 (1)                                      | \$5,742,362.50 (1)                              | \$1,980 (1)                   |
| Common Stock, \$.01 par value                         | 197,500                    | \$7.00 (2)                                      | \$1,382,500.00 (2)                              | \$ 477                        |
| TOTAL:  | 938,450                    | -   | \$7,124,862.50                                  | \$2,457                       |

(1) Estimated solely for purpose of computing the amount of the registration fee based on the average of the high and low prices of the Common Stock on the Nasdaq National Market on February 5, 1996, as reported in The Wall Street Journal.

(2) Calculated using as the offering price the exercise price of warrants pursuant to which such shares may be issued by the Registrant.

THE REGISTRANT HEREBY AMENDS THIS REGISTRATION STATEMENT ON SUCH DATE OR DATES AS MAY BE NECESSARY TO DELAY ITS EFFECTIVE DATE UNTIL THE REGISTRANT SHALL FILE A FURTHER AMENDMENT WHICH SPECIFICALLY STATES THAT THIS REGISTRATION STATEMENT SHALL THEREAFTER BECOME EFFECTIVE IN ACCORDANCE WITH SECTION 8(a) OF THE SECURITIES ACT OF 1933 OR UNTIL THE REGISTRATION STATEMENT SHALL BECOME EFFECTIVE ON SUCH DATE AS THE COMMISSION, ACTING PURSUANT TO SAID SECTION 8(a), MAY DETERMINE.

PROSPECTUS

938,450 SHARES, INCLUDING 740,950 SHARES  
BEING SOLD BY THE SELLING STOCKHOLDERS AND  
197,500 SHARES ISSUABLE ON EXERCISE OF OUTSTANDING  
WARRANTS TO PURCHASE COMMON STOCK AT A PRICE OF  
\$7.00 PER SHARE (THE "WARRANTS")

ADVANCED POLYMER SYSTEMS, INC.

Of the 938,450 shares (the "Shares") of Common Stock, \$.01 par value, (the "Common Stock") of Advanced Polymer Systems, Inc. (the "Company" or "APS") covered by this prospectus (the "Prospectus"), 197,500 Shares may be sold by the Company on exercise of warrants ("Warrants") to purchase Common Stock and 740,950 Shares may be sold by the holders of Shares (collectively, the "Selling Stockholders") named in this Prospectus. See "Selling Stockholders." The Company will not receive any of the proceeds from the sale of Shares by the Selling Stockholders; however, the Company could receive up to \$1,382,500 on the exercise of the Warrants.

The Company has not made any underwriting arrangements with respect to the Shares issuable on exercise of the Warrants. The Company's Common Stock is traded on the Nasdaq National Market under the symbol "APOS". On February 5, 1996, the closing price for the Common Stock, as reported on the Nasdaq National Market, was \$7.50.

Shares covered by this Prospectus may be offered for sale from time to time by the Selling Stockholders at such prices and on such terms as may then be obtainable, in negotiated transactions, or otherwise. See "Plan of Distribution." This Prospectus may be used by the Selling Stockholders or by any broker-dealer who may participate in sales of securities covered hereby. The Selling Stockholders and the brokers and dealers through whom such sales are effected may be deemed to be underwriters under the Securities Act of 1933, as amended (the "Securities Act"). The Selling Stockholders will pay all commissions, transfer taxes, and other expenses associated with the sales of securities by them. The Company has paid the expenses of the preparation of this Prospectus. The Company has agreed to indemnify the Selling Stockholders against certain liabilities, including liabilities arising under the Securities Act.

APS has filed with the Securities and Exchange Commission (the "Commission") a Registration Statement under the Securities Act with respect to the securities offered by this Prospectus. As permitted by the rules and regulations of the commission, this Prospectus does not contain all of the information set forth in the Registration Statement and the exhibits and schedules thereto. For further information with respect to APS and the securities offered hereby, reference is made to the Registration Statement and the exhibits thereto, which may be examined without charge at the public reference facilities maintained by the Commission at Judiciary Plaza, 450 Fifth Street, N.W., Washington, D.C. 20549, and copies of which may be obtained from the Commission upon payment of the prescribed fees.

-----  
SECURITIES OFFERED HEREBY INVOLVE A HIGH DEGREE OF RISK.  
(See "RISK FACTORS.")  
-----

THESE SECURITIES HAVE NOT BEEN APPROVED OR DISAPPROVED BY THE  
SECURITIES AND EXCHANGE COMMISSION OR ANY STATE SECURITIES COMMISSION  
NOR HAS THE SECURITIES AND EXCHANGE COMMISSION OR ANY STATE SECURITIES  
COMMISSION PASSED UPON THE ACCURACY OR ADEQUACY OF THIS PROSPECTUS.  
ANY REPRESENTATION TO THE CONTRARY IS A CRIMINAL OFFENSE.

-----  
The date of this Prospectus is \_\_\_\_\_, 1996

No dealer, salesman, or any other person has been authorized to give any information or to make any representations or projections of future performance other than those contained in this Prospectus, and any such other information, projections, or representations, if given or made, must not be relied upon as having been so authorized. The delivery of this Prospectus or any sale hereunder at any time does not imply that the information herein is correct as of any time subsequent to its date. This Prospectus does not constitute an offer to sell or a solicitation of an offer to buy any of the securities offered hereby in any jurisdiction where, and to any person to whom, it is unlawful to make such offer or solicitation.

#### AVAILABLE INFORMATION

This Prospectus omits certain of the information contained in the Registration Statement covering the Common Stock that is on file with the Securities and Exchange Commission (the "Commission"). The Company is subject to the informational requirements of the Securities Exchange Act of 1934, as amended (the "1934 Act") and in accordance therewith files reports, proxy statements and other information with the Commission. Such Registration Statement, reports, proxy statements and other information can be inspected and copied at public reference facilities maintained by the Commission at Judiciary Plaza, 450 Fifth Street, N.W., Washington, D.C. 20549. Copies of such material can be obtained at prescribed rates from the Public Reference Section of the Commission at such address. Such reports, proxy statements and other information can also be inspected at the Commission's regional offices at 7 World Trade Center, Suite 1300, New York, New York 10048 and 500 West Madison, Chicago, Illinois 60661, and at the offices of the Nasdaq Stock Market at 9513 Key West Avenue, Rockville, Maryland 20850-3389.

#### DOCUMENTS INCORPORATED BY REFERENCE

There are hereby incorporated in this Prospectus by reference the following documents filed pursuant to the 1934 Act: (i) the Company's Annual Report on Form 10-K for the fiscal year ended December 31, 1994; (ii) the Company's Quarterly Reports on Form 10-Q for the fiscal quarters ended March 31, 1995, June 30, 1995 and September 30, 1995; (iii) the Company's Proxy Statement for the Annual Meeting of Shareholders held on June 14, 1995; and (iv) the description of the Company's securities contained in its Form 8-A Registration Statements filed pursuant to Section 12 of the 1934 Act.

All documents filed by the Company pursuant to Section 13(a), 13(c), 14 or 15(d) of the 1934 Act after the date of this Prospectus and prior to the termination of the offering of the securities offered hereby shall be deemed to be incorporated by reference in this Prospectus.

The Company hereby undertakes to provide without charge to each person, including any beneficial owner, to whom a copy of this Prospectus has been delivered, upon the written or oral request of such person, a copy of any or all of the documents referred to above which have been or may be incorporated in this Prospectus by reference, other than exhibits to such documents which are not specifically incorporated by reference into the information that this Prospectus incorporates. Requests for such copies should be directed to: Advanced Polymer Systems, Inc., 3696 Haven Avenue, Redwood City, California 94063, Attention: Investor Relations, Telephone: (415) 366-2626.

## RECENT DEVELOPMENTS

The Company has filed two new drug application ("NDA") with the U.S. Food and Drug Administration and is awaiting final action by the FDA on these applications. The first NDA covers a melanin-based sunscreen product for the Company's own portfolio and the second NDA covers a prescription acne preparation licensed to Ortho McNeil Pharmaceuticals (a Johnson & Johnson subsidiary).

During the third and fourth quarters of 1995, the Company received cash infusions of \$7.8 million in the form of bank borrowing of \$3.0 million, a sale/leaseback transaction for \$3.15 and subordinated debt of \$1.65 million.

## RISK FACTORS

The Shares of Common Stock offered hereby by the Selling Stockholders involve a high degree of risk and prospective purchasers should carefully consider the following factors.

**History of Losses.** The Company has incurred cumulative losses through September 30, 1995 of approximately \$57 million, of which approximately \$5.0 million was incurred in the nine months ended September 30, 1995, and anticipates that losses will continue for at least the next 12 months as the Company continues research, development, production and marketing activities. There can be no assurance that future revenues from product sales will be significant, that the Company will be able to sell products at a profit or that the Company will become profitable.

**Capital Resources.** On September 30, 1995, the Company had \$6.6 million in cash, cash equivalents and short-term marketable securities. In the nine months ended September 30, 1995, cash of approximately \$5.9 million was used by operations. The Company's existing cash, cash equivalents and short-term marketable securities, collections of trade accounts receivable, interest income and funds generated from operations, are expected to be sufficient to meet the Company's near-term cash requirements assuming no changes to existing business plans. However, if the Company's costs are higher than expected or revenues do not meet expectations, the Company may have to pursue other opportunities to generate additional cash to sustain and develop its business, including joint ventures, licensing and other debt and equity financings. If such additional funding is required, but is unavailable on commercially reasonable terms, the Company would have to significantly reduce operating expenses, which could adversely affect operations.

**New Technology; No Proof of Market Acceptance.** The Company's Microsponge(R) products are based on relatively new technologies. The Company has successfully entrapped numerous ingredients and agents (such as sunscreens, moisturizers, fragrances and oils) and believes its products provide greater efficacy and increased functionality. However, commercialization of products utilizing the Company's Microsponge delivery systems is only now beginning, and there can be no assurance that such products will be successfully commercialized by the Company or others.

**Marketing.** The Company is utilizing a combination of collaboration agreements and independent efforts to market its Microsponge products. The collaborative arrangements are intended to provide APS with the marketing expertise and/or financial strength of other companies. There can be no assurance that such collaborative arrangements will prove successful in marketing products on behalf of the Company. The Company markets four of its own consumer products, as well as several consumer products produced by Johnson & Johnson Consumer Products, Inc. ("Johnson & Johnson"), through its wholly owned subsidiary Premier, Inc. ("Premier") which the Company acquired in April 1993. Premier has had a limited history in marketing certain over-the-counter drug and toiletry products, and there can be no certainty that Premier will be able to continue to successfully market products produced by the Company or others.

**Seasonality.** The business of Premier is highly seasonal. Currently, it principally markets and distributes sunscreen products, the sales of which are heavily weighted to the first two fiscal quarters. Consequently, results of operations for these interim periods are not necessarily indicative of results for the full fiscal year.

**Dependence on Key Employees.** The Company's developments to date and in the future depend greatly on the efforts of key management and technical employees. The loss of any of these key contributors could have an adverse impact on the progress of the Company's business.

**Inventory Build-Up.** The Company's exclusive distribution arrangement with Johnson & Johnson requires Premier to increase inventory levels at the beginning of each year sufficient to satisfy anticipated demand for sunscreen products during the selling season. Extended terms are given to the Company on these products by Johnson & Johnson so that accounts payable are not due until the third fiscal quarter. The Company offers similar extended terms to retailers, and anticipates paying amounts owed to Johnson & Johnson from retail accounts receivable.

**Government Regulation.** Certain of the Company's products are subject to regulation by numerous national and local governmental authorities in the United States and by like regulatory authorities in other countries where the Company intends to test and market pharmaceutical products that it may develop. The regulatory process, which includes preclinical testing and clinical trials to establish product safety and efficacy, can take many years and require the expenditure of substantial resources. There can be no assurance that even after such time and expenditure, regulatory agency approvals will be obtained. Moreover, if regulatory agency approval of a product is granted, such approval may entail limitations on the indicated uses for which the product may be marketed. Further, even if such regulatory approval is obtained, a marketed product and its manufacture are subject to continued review by regulatory authorities.

In addition, although personal care products are not currently subject to active regulation by the FDA in the same manner as pharmaceutical products, more extensive regulation could occur in the future. Such regulation could impose additional costs on the Company or slow the introduction of personal care products utilizing the Company's delivery systems.

**Competition, Markets and Technological Change.** Other companies are developing products based on enhanced delivery technologies for cosmetic, therapeutic and industrial applications, and technological developments are expected to occur at a rapid pace. There can be no assurance that other technologies will not prove superior to the Company's technology. APS is in competition with other companies that possess greater financial and technical resources, manufacturing and marketing capabilities, and experience in testing and obtaining any necessary regulatory approval. The Company also competes with many companies, most with greater financial resources, in marketing over-the-counter personal care products.

**Manufacturing.** Products utilizing the Company's Microsponge delivery systems must be manufactured at a competitive cost in far greater quantities than now produced by the Company. The Company has a manufacturing facility in Lafayette, Louisiana, and research laboratory and pilot plant facilities in Lafayette, Louisiana and in Redwood City, California. The Company's manufacturing capacity is currently 750,000 to 1,000,000 pounds a year, but successful commercialization of certain products may require manufacturing in quantities exceeding the Company's current capacity. The Company believes it can increase its manufacturing capacity through installation of additional equipment, but there can be no assurance that the Company will be able to achieve the requisite increase in manufacturing capacity within the time and at a cost commensurate with effective product commercialization.

**Patents and Trade Secrets.** There can be no assurance that any patents owned or controlled by APS will provide commercially significant protection of the Company's technology or ensure that the Company may not be determined to infringe valid patents of others. The Company's patents have not been tested in court, and the validity and scope of the Company's proprietary rights could be challenged. The Company has also received foreign patents, but since the patent laws of foreign countries differ from those of the United States, the degree of protection afforded by any foreign patents may be different from that available under U.S. patent laws.

The Company also relies on trade secrets and proprietary know-how which it seeks to protect by confidentiality agreements with its collaborators, employees and consultants. There can be no assurance that these agreements will not be breached, that the Company will have adequate remedies for any breach or that the Company's trade secrets and proprietary know-how will not otherwise become known or be discovered by competitors.

Possible Volatility of Stock Price; Shares Eligible for Future Sale.

The market price of the Company's Common Stock has been and may continue to be highly volatile. Future events, many of which will be beyond the control of the Company, as well as expected quarterly fluctuations in revenues and financial results, may have a significant impact on the market price of the Company's Common Stock. Future sales of Shares by the Selling Stockholders or by other current stockholders and by option holders and warrant holders who exercise Company stock options or warrants could have a depressive effect on the market price of the Company's Common Stock.

Reliance on Collaborators. The Company has entered into collaborative agreements with certain major corporations pursuant to which such companies are entitled to certain product and marketing rights. The Company also expects to rely, at least in part, on additional collaborative agreements to develop and commercialize certain future products. There can be no assurance that the Company will be able to negotiate acceptable collaborative agreements in the future, or that the Company's existing collaborative agreements or such future collaborative agreements will be successful.

USE OF PROCEEDS

The Company will not receive any of the proceeds from the sale of the Shares by the Selling Stockholders. The Company could receive up to \$1,382,500 if the Warrants are exercised in full. No assurance can be given that any of the Warrants will be exercised. The Company expects that any net proceeds from the exercise of the Warrants will be used for working capital and general corporate purposes, including product development and marketing. Pending utilization, such funds will be invested in money market and other short-term interest bearing obligations.

## SELLING STOCKHOLDERS

The following table sets forth certain information regarding beneficial ownership of the Company's Common Stock by the Selling Stockholders as of January 31, 1996 and as adjusted to reflect the sale by Selling Stockholders of Shares offered by them by this Prospectus.

|  | Common Stock<br>Beneficially Owned<br>Prior to Offering (1) |         | Common<br>Stock<br>to be<br>Sold | Common Stock<br>Beneficially Owned<br>After Offering |         |
|--|---|---------|----------------------------------|--|---------|
|  | Number  | Percent |                                  | Number   | Percent |
| Johnson & Johnson<br>Development Corporation<br>One Johnson & Johnson Plaza<br>New Brunswick, NJ 08933 | 2,355,107 (2)   | 13.7%   | 432,101                          | 1,923,006 (2)  | 11.2%   |
| Dow Corning Corporation  | 200,000   | 1.2%    | 200,000                          | 0  | -       |
| BioSource Technologies Inc.  | 94,000  | *       | 94,000                           | 0  | -       |
| Cupertino National Bank  | 36,674 (3)  | *       | 4,174                            | 32,500 (3)   | *       |
| Mees Pierson   | 10,675  | *       | 10,675                           | 0  | -       |
| TOTAL:   | 2,696,456   | 15.7%   | 740,950                          | 1,955,506  | 11.4%   |

\* Less than 1%.

- (1) Applicable percentage of ownership is based on 17,222,492 shares of Common Stock outstanding as of January 31, 1996.
- (2) Includes 200,000 shares of Common Stock issuable on exercise of a warrant.
- (3) Includes 32,500 shares of Common Stock issuable on exercise of a warrant.

## PLAN OF DISTRIBUTION

All or a portion of the Shares of Common Stock offered hereby by the Selling Stockholders may be delivered and/or sold in transactions from time to time on the over-the-counter market at prices prevailing at the time, at prices related to such prevailing prices or at negotiated prices and/or may also be used to cover any short positions previously established. The Selling Stockholders may effect such transactions by selling to or through one or more broker-dealers, and such broker-dealers may receive compensation in the form of underwriting discounts, concessions or commissions from the Selling Stockholders. The Selling Stockholders and any broker-dealers that participate in the distribution may under certain circumstances be deemed to be "underwriters" within the meaning of the Securities Act, and any commissions received by such broker-dealers and any profits realized on the resale of Shares by them may be deemed to be underwriting discounts and commissions under the Securities Act. The Selling Stockholders may agree to indemnify such broker-dealers against certain liabilities, including liabilities under the Securities Act. In addition, the Company has agreed to indemnify the Selling Stockholders with respect to the Shares offered hereby against certain liabilities, including, without limitation, certain liabilities under the Securities Act, or, if such indemnity is unavailable, to contribute toward amounts required to be paid in respect of such liabilities.

Any broker-dealer participating in such transactions as agent may receive commissions from the Selling Stockholders (and, if they act as agent for the purchaser of such Shares, from such purchaser). Broker-dealers may agree with the Selling Stockholders to sell a specified number of Shares at a stipulated price per share, and, to the extent such a broker-dealer is unable to do so acting as agent for the Selling Stockholders, to purchase as principal any unsold Shares at the price required to fulfill the broker-dealer commitment to the Selling Stockholders. Broker-dealers who acquire Shares as principal may thereafter resell such Shares from time to time in transactions (which may involve crosses and block transactions and which may involve sales to and through other broker-dealers, including transactions of the nature described above) in the over-the-counter market, in negotiated transactions or otherwise at market prices prevailing at the time of sale or at negotiated prices, and in connection with such resales may pay to or receive from the purchasers of such Shares commissions computed as described above. To the extent required under the Securities Act, a supplemental prospectus will be filed, disclosing (a) the name of any such broker-dealers, (b) the number of Shares involved, (c) the price at which such Shares are to be sold, (d) the commissions paid or discounts or concessions allowed to such broker-dealers, where applicable, (e) that such broker-dealers did not conduct any investigation to verify the information set out or incorporated by reference in this prospectus, as supplemented, and (f) other facts material to the transaction.

The Selling Stockholders will pay all commissions, transfer taxes, and other expenses associated with the sale of securities by them. The Shares offered hereby are being registered pursuant to contractual obligations of the Company, and the Company has paid the expenses of the preparation of this Prospectus. The Company has not made any underwriting arrangements with respect to the sale of Shares offered hereby on exercise of the Warrants. Upon exercise of Warrants, the Shares will be issued by the Company directly to the persons exercising the Warrants.

## DESCRIPTION OF CAPITAL STOCK

As of the date of this Prospectus, the authorized capital stock of the Company consists of 50,000,000 shares of \$0.01 par value Common Stock ("Common Stock") and 2,500,000 shares of \$0.01 par value Preferred Stock ("Preferred Stock").

## COMMON STOCK

As of January 31, 1996, there were 17,222,492 shares of Common Stock outstanding held of record by 644 stockholders. The holders of Common Stock are entitled to one vote for each share held of record on all matters submitted to a vote of the stockholders. Subject to preferences that may be applicable to any outstanding Preferred Stock, holders of Common Stock are entitled to receive ratably such dividends as may be declared by the Board of Directors out of funds legally available therefor. In the event of a liquidation, dissolution or winding up of the Company, holders of Common Stock are entitled to share ratably in all assets remaining after payment of liabilities and the liquidation preference of any outstanding Preferred Stock. Holders of Common Stock have no preemptive rights, no

right to convert their Common Stock into any other securities, and no right to vote cumulatively for the election of directors. The outstanding shares of Common Stock are fully paid and nonassessable.

The Company has not paid cash dividends on its Common Stock and does not plan to pay any such dividends in the foreseeable future. Under certain lending agreements, the Company is restricted from declaring or paying dividends on its Common Stock.

#### PREFERRED STOCK

The Board of Directors may authorize the issuance of up to 2,500,000 shares of Preferred Stock in one or more series and fix the rights, preferences, privileges and restrictions thereof, including dividend rights, conversion rights, voting rights, terms of redemption, liquidation preferences and the number of shares constituting any series or the designation of such series, without any further vote or action by the stockholders. The issuance of Preferred Stock may have the effect of delaying, deferring or preventing a change in control of the Company without action by the shareholders and could adversely affect the rights and powers, including voting rights, of the holders of Common Stock. In certain circumstances, the issuance of Preferred Stock could depress the market price of Common Stock. There are no shares of Preferred Stock outstanding.

#### WARRANTS

Of the 938,450 Shares offered hereby, an aggregate of 197,500 Shares are issuable upon exercise of warrants to purchase Common Stock. The exercise prices of the Warrants is \$7.00 per share. The warrants will remain exercisable until March 27, 2000, except under certain circumstances. The exercise price of the Warrants is subject to adjustment (i) in the event there is a subdivision or combination of the outstanding shares of Company Common Stock or (ii) if the Company declares dividends on its Common Stock payable in Common Stock or other securities of the Company.

#### LEGAL MATTERS

The legality of the issuance of the securities being offered hereby is being passed upon for the Company by Heller, Ehrman, White & McAuliffe, Palo Alto, California. Mr. Julian Stern, a member of Heller, Ehrman, White & McAuliffe, who is also the Secretary of the Company, owns beneficially 179,000 shares of Common Stock (including options and warrants).

#### EXPERTS

The consolidated financial statements and schedules of Advanced Polymer Systems, Inc. and subsidiaries as of December 31, 1994 and 1993 and for each of the years in the three-year period ended December 31, 1994 have been incorporated by reference herein and in the related Registration Statement in reliance upon the report of KPMG Peat Marwick LLP, independent certified public accountants, incorporated by reference herein, and upon the authority of said firm as experts in accounting and auditing. The report of KPMG Peat Marwick LLP covering the December 31, 1994 consolidated financial statements refers to a change in the method of accounting for certain investments in debt and equity securities. To the extent that KPMG Peat Marwick LLP audits and reports on consolidated financial statements of Advanced Polymer Systems, Inc. and subsidiaries issued at future dates, and consents to the use of their report thereon, such consolidated financial statements also will be incorporated by reference in the Registration Statement in reliance upon their report and said authority.

## PART II

## INFORMATION NOT REQUIRED IN PROSPECTUS

## ITEM 14. OTHER EXPENSES OF ISSUANCE AND DISTRIBUTION.

The following table sets forth various expenses in connection with the sale and distribution of the securities being registered. All of the amounts shown are estimates except for the Securities and Exchange Commission Registration Fee.

|   |          |
|---|----------|
| Securities and Exchange Commission Registration Fee . . . . . | \$ 2,457 |
| Accounting Fees . . . . .                                     | 5,000    |
| Legal Fees and Disbursements . . . . .                        | 10,000   |
| Miscellaneous . . . . .                                       | 543      |
|   | -----    |
| TOTAL:  | \$18,000 |
|   | =====    |

## ITEM 15. INDEMNIFICATION OF OFFICERS AND DIRECTORS.

The registrant has the power to indemnify its officers and directors against liability for certain acts pursuant to Section 145 of the General Corporation Law of the State of Delaware. Section B of Article VI of the registrant's Certificate of Incorporation provides:

"(1) Right to Indemnification. Each person who was or is made a party or is threatened to be made a party to or is involved in any action, suit or proceeding, whether civil, criminal, administrative or investigative (hereinafter a "proceeding"), by reason of the fact that he or she, or a person of whom he or she is the legal representative, is or was a director or officer, of the Corporation or is or was serving at the request of the Corporation, as a director, officer, employee or agent of another corporation or of a partnership, joint venture, trust or other enterprise, including service with respect to employee benefit plans, whether the basis of such proceeding is alleged action in an official capacity as a director, officer, employee or agent or in any other capacity while serving as a director, officer, employee or agent, shall be indemnified and held harmless by the Corporation to the fullest extent authorized by the General Corporation Law of the State of Delaware, as the same exists or may hereafter be amended (but, in the case of any such amendment, only to the extent that such amendment permits the Corporation to provide broader indemnification rights than said law permitted the Corporation to provide prior to such amendment), against all expense, liability and loss (including attorneys' fees, judgments, fines, ERISA excise taxes or penalties and amounts paid or to be paid in settlement) reasonably incurred or suffered by such person in connection therewith and such indemnification shall continue as to a person who has ceased to be a director, officer, employee or agent and shall inure to the benefit of his or her heirs, executors and administrators; provided, however, that, the Corporation shall indemnify any such person seeking indemnification in connection with a proceeding (or part thereof) initiated by such person only if such proceeding (or part thereof) was authorized by the board of directors of the Corporation. The right to indemnification conferred in this Section B shall be a contract right and shall include the right to be paid by the Corporation the expenses incurred in defending any such proceeding in advance of its final disposition; provided, however, that, if the General Corporation Law of the State of Delaware requires, the payment of such expenses incurred by a director or officer in his or her capacity as a director or officer (and not in any other capacity in which service was or is rendered by such person while a director or officer, including, without limitation, service to an employee benefit plan) in advance of the final disposition of a proceeding, shall be made only upon delivery to the Corporation of an undertaking, by or on behalf of such director or officer, to repay all amounts so advanced if it shall ultimately be determined that such director or officer is not entitled to be indemnified under this Section or otherwise. The Corporation may, by action of its Board of Directors, provide indemnification to employees and agents of the Corporation with the same scope and effect as the foregoing indemnification of directors and officers.

(2) Non-Exclusivity of Rights. The right to indemnification and the payment of expenses incurred in defending a proceeding in advance of its final disposition conferred in this Section B shall not be exclusive of any other rights which any person may have or hereafter acquire under any statute, provisions of this Certificate of Incorporation, Bylaw, agreement, vote of stockholders or disinterested directors or otherwise.

(3) Insurance. The Corporation may maintain insurance, at its expense, to protect itself and any director, officer, employee or agent of the Corporation or another corporation, partnership, joint venture, trust or other enterprise against any such expense, liability or loss, whether or not the Corporation would have the power to indemnify such person against such expense, liability or loss under Delaware General Corporation Law."

Registrant maintains directors' and officers' liability insurance in the amount of \$5,000,000 which covers civil liabilities. Such insurance helps the Registrant to attract qualified officers and directors, by providing a means for the Company to pay the costs and expenses involved in the event civil litigation is brought against of one of the Registrant's officers or directors.

ITEM 16. EXHIBITS.

| EXHIBIT<br>----- | DESCRIPTION<br>-----   |
|------------------|--|
| 4.1              | Investment Agreement between Registrant and Johnson & Johnson Development Corporation dated May 13, 1994 (1) |
| 4.2              | Registration Rights Agreement between Registrant and Dow Corning Corporation dated January 23, 1996          |
| 4.3              | Form of Warrant to Purchase Common Stock issued to Cupertino National Bank                                   |
| 4.4              | Form of Warrant to Purchase Common Stock   |
| 5                | Opinion of Heller, Ehrman, White & McAuliffe (2)   |
| 23.1             | Consent of Heller, Ehrman, White & McAuliffe (filed as part of Exhibit 5)                                    |
| 23.2             | Consent of KPMG Peat Marwick LLP   |
| 24               | Power of Attorney (See Page II-4)  |

---

(1) Filed as Exhibit 4.3 to Registration Statement on Form S-3 (No. 33-82562) and incorporated herein by reference.

(2) To be filed by amendment.

ITEM 17. UNDERTAKINGS.

A. The undersigned Registrant hereby undertakes:

(1) To file, during any period in which offers or sales are being made, a post-effective amendment to this registration statement;

(i) To include any prospectus required by section 10(a)(3) of the Securities Act of 1933;

(ii) To reflect in the prospectus any facts or events arising after the effective date of the Registration Statement (or the most recent post-effective amendment thereof) which, individually or in the aggregate, represent a fundamental change in the information set forth in the Registration Statement;

(iii) To include any material information with respect to the plan of distribution not previously disclosed in the Registration Statement or any material change to such information in the Registration Statement;

Provided, however, that paragraphs (i) and (ii) shall not apply if the information required to be included in a post-effective amendment by those paragraphs is contained in periodic reports filed by the registrant pursuant to section 13 or section 15(d) of the Securities Exchange Act of 1934 that are incorporated by reference in the Registration Statement.

(2) That, for the purpose of determining any liability under the Securities Act of 1933, each such post-effective amendment shall be deemed to be a new Registration Statement relating to the securities offered therein, and the offering of such securities at that time shall be deemed to be the initial bona fide offering thereof.

(3) To remove from registration by means of a post-effective amendment any of the securities being registered which remain unsold at the termination of the offering.

B. That, for purposes of determining any liability under the Securities Act of 1933, each filing of the registrant's annual report pursuant to section 13(a) or section 15(d) of the Securities Exchange Act of 1934 (and, where applicable, each filing of an employee benefit plan's annual report pursuant to Section 15(d) of the Securities Exchange Act of 1934) that is incorporated by reference in the registration statement shall be deemed to be a new registration statement relating to the securities offering therein, and the offering of such securities at that time shall be deemed to be the initial bona fide offering thereof.

C. Insofar as indemnification for liabilities arising under the Securities Act of 1933 may be permitted to directors, officers and controlling persons of the Registrant pursuant to the provisions described under Item 15 above, or otherwise, the registrant has been advised that in the opinion of the Securities and Exchange Commission, such indemnification is against public policy as expressed in the Act and is, therefore, unenforceable. In the event that a claim for indemnification against such liabilities (other than the payment by the Registrant of expenses incurred or paid by a director, officer or controlling person of the Registrant in the successful defense of any action, suit or proceeding) is asserted against the Registrant by such Director, officer or controlling person in connection with the securities being registered, the Registrant will, unless in the opinion of its counsel the matter has been settled by controlling precedent, submit to a court of appropriate jurisdiction the question whether such indemnification by it is against public policy as expressed in the Act and will be governed by the final adjudication of such issue.

## SIGNATURES

Pursuant to the requirements of the Securities Act of 1933, the Registrant certifies that it has reasonable grounds to believe that it meets all of the requirements for filing on Form S-3 and has duly caused this Registration Statement to be signed on its behalf by the undersigned, thereunto duly authorized in Redwood City, State of California, on the 6th day of February, 1996.

ADVANCED POLYMER SYSTEMS, INC.

By: /S/ MICHAEL P.J. O'CONNELL

-----  
Michael P.J. O'Connell  
Chief Financial Officer

## POWER OF ATTORNEY

KNOW ALL PERSONS BY THESE PRESENTS, that each person whose signature appears below constitutes and appoints John J. Meakem, Jr., Michael P.J. O'Connell, or either of them, with the power of substitution, her or his attorney in fact, to sign any amendments to this Registration Statement (including post-effective amendments), and to file the same, with exhibits thereto and other documents in connection therewith, with the Securities and Exchange Commission, hereby ratifying and confirming all that each of said attorney-in-fact, or his substitute or substitutes, may do or cause to be done by virtue hereof.

Pursuant to the requirements of the Securities Act of 1933, this Registration Statement has been signed below by the following persons in the capacities and on the dates indicated.

|   |  |                  |
|---|--|------------------|
| /S/ JOHN J. MEAKEM, JR.<br>-----<br>John J. Meakem, Jr.       | Chairman of the Board and President<br>(Principal Executive Officer) | February 6, 1996 |
| /S/ MICHAEL P.J. O'CONNELL<br>-----<br>Michael P.J. O'Connell | Chief Financial Officer<br>(Principal Accounting Officer)            | February 6, 1996 |
| /S/ JORGE HELLER<br>-----<br>Jorge Heller                     | Director   | February 6, 1996 |
| /S/ HELEN C. LEONG<br>-----<br>Helen C. Leong                 | Director   | February 6, 1996 |
| /S/ PETER RIEPENHAUSEN<br>-----<br>Peter Riepenhausen         | Director   | February 6, 1996 |
| /S/ TOBY ROSENBLATT<br>-----<br>Toby Rosenblatt               | Director   | February 6, 1996 |
| /S/ GREGORY H. TURNBULL<br>-----<br>Gregory H. Turnbull       | Director   | February 6, 1996 |
| /S/ DENNIS WINGER<br>-----<br>Dennis Winger                   | Director   | February 6, 1996 |
| /S/ CARL W. EHMANN<br>-----<br>Carl W. Ehmann                 | Director   | February 6, 1996 |

## ADVANCED POLYMER SYSTEMS, INC.

## EXHIBIT INDEX

| EXHIBIT<br>----- | DESCRIPTION<br>-----   |
|------------------|--|
| 4.1              | Investment Agreement between Registrant and Johnson & Johnson Development Corporation dated May 13, 1994 (1) |
| 4.2              | Registration Rights Agreement between Registrant and Dow Corning Corporation dated January 23, 1996          |
| 4.3              | Warrant issued to Cupertino National Bank  |
| 4.4              | Form of Warrant to Purchase Common Stock   |
| 5                | Opinion of Heller, Ehrman, White & McAuliffe (2)   |
| 23.1             | Consent of Heller, Ehrman, White & McAuliffe<br>(included in Exhibit 5)                                      |
| 23.2             | Consent of KPMG Peat Marwick LLP   |
| 24               | Power of Attorney (See Page II-4)  |

---

(1) Filed as Exhibit 4.3 to Registration Statement on Form S-3 (No. 33-82562) and incorporated herein by reference.

(2) To be filed by amendment.

## REGISTRATION RIGHTS AGREEMENT

January 23, 1996

Advanced Polymer Systems, Inc., a Delaware corporation ("APS") and Dow Corning Corporation, a Michigan corporation ("PURCHASER"), hereby agree as follows:

## RECITALS

A. APS is acquiring a polymer-based carrier system business from PURCHASER, and in payment thereof is issuing 200,000 shares of its Common Stock (the "Shares") to PURCHASER.

B. The parties wish to provide for the registration of the subsequent resale of the Shares and for the orderly distribution thereof, all on the terms and conditions hereof.

## THE PARTIES AGREE AS FOLLOWS:

## 1. Registration Rights; Listing.

1.1 Certain Definitions. As used herein, the following terms shall have the following respective meanings:

(a) "Commission" shall mean the Securities and Exchange Commission or any other federal agency at the time administering the Securities Act.

(b) "Convertible Securities" shall mean securities of APS convertible into or exchangeable for Registrable Securities.

(c) "Holder" shall mean any holder of outstanding Registrable Securities which have not been sold to the public, but only if such holder is PURCHASER or an assignee or transferee of Registration rights as permitted by Section 1.8.

(d) The terms "Registrar", "Registered" and "Registration" refer to a registration effected by preparing and filing a registration statement in compliance with the Securities Act ("Registration Statement"), and the declaration or ordering of the effectiveness of such Registration Statement.

(e) "Registrable Securities" shall mean the Shares issued to PURCHASER by APS, together with any Common Stock issued with respect to the Shares pursuant to stock splits, stock dividends and similar distributions, so long as such securities have not been sold to the public in a public distribution or a public securities transaction or sold in a single transaction exempt from the registration and prospectus delivery requirements of the Securities Act such that all transfer restrictions and restrictive legends with respect to such Shares shall have been removed in connection with such sale.

(f) "Registration Expenses" shall mean all expenses incurred by APS in complying with this Agreement, including, without limitation, all federal and state registration, qualification and filing fees, printing expenses, fees and disbursements of counsel for APS, blue sky fees and expenses, the expense of any special audits incident to or required by any such Registration and any expenses related to the maintenance of such Registration and qualification during the period specified in Section 1.4(a) hereof.

(g) "Securities Act" shall mean the Securities Act of 1933, as amended, or any similar federal statute, and the

rules and regulations of the Commission thereunder, all as the same shall be in effect at the time.

(h) "Selling Expenses" shall mean all underwriting discounts and selling commissions applicable to the sale of Registrable Securities pursuant to this Agreement.

## 1.2 Registration.

1.2.1 Registration. Subject to the terms of this Agreement, APS shall use its best efforts to effect Registration of the Registrable Securities within 60 days of their issuance to PURCHASER by filing as soon as possible after the date hereof a Form S-3 Registration Statement (or any successor to Form S-3) with the Commission.

1.2.2 Registration of Other Securities. Any Registration Statement filed under this Section 1 may include securities of APS other than Registrable Securities; provided, however, that neither PURCHASER or any Holder shall be required to utilize an underwriter in connection with the sale of their Registrable Securities.

1.2.3 Blue Sky. In the event of any Registration pursuant to Section 1, APS will exercise its best efforts to Register and qualify the securities covered by the Registration Statement under such other securities or Blue Sky laws of such jurisdictions as shall be reasonably appropriate for the distribution of such securities; provided, however, that:

(a) APS shall not be required to qualify to do business or to file a general consent to service of process in

any such states or jurisdictions, unless APS is already subject to service in such jurisdiction; and

(b) notwithstanding anything in this Agreement to the contrary, in the event any jurisdiction in which the securities shall be qualified imposes a non-waivable requirement that expenses incurred in connection with the qualification of the securities be borne by selling shareholders, such expenses shall be payable pro rata by selling shareholders.

1.3 Expenses of Registration. All Registration Expenses (but not Selling Expenses) incurred in connection with the Registration pursuant to Section 1 shall be borne by APS.

1.4 Registration Procedures. Whenever required under this Agreement to effect the Registration of any securities of APS, subject to the other provisions of this Agreement, APS shall, as expeditiously as reasonably possible:

(a) Prepare and file with the Commission a Registration Statement with respect to such securities in accordance with Section 1.2.1 and use its diligent best efforts to cause such Registration Statement to become effective as promptly as possible thereafter and to remain effective for a period equal to the shorter of: (i) three years from the date of such effectiveness; or (ii) until the distribution described in the Registration Statement has been completed.

(b) Prepare and file with the Commission such amendments and supplements to such Registration Statement and the prospectus used in connection with such Registration Statement as may be necessary to comply with the provisions of the Securities

Act with respect to the disposition of all securities covered by such Registration Statement.

(c) Furnish to the Holders participating in such Registration and the underwriters, if any, of the securities being Registered, such reasonable number of copies of the Registration Statement, preliminary prospectus and final prospectus as they may request in order to facilitate the public offering of such securities.

1.5 Additional Information Available. So long as the Registration Statement is effective covering the resale of Shares owned by a Holder, APS will furnish to the Holder(s):

(a) as soon as practicable after it becomes available (but in the case of APS' Annual Report to Stockholders, within 120 days after the end of each fiscal year of APS), one copy of: (i) its Annual Report to Stockholders (which Annual Report shall contain financial statements audited in accordance with generally accepted accounting principles by a national firm of certified public accountants); (ii) if not included in substance in the Annual Report to Stockholders, its Annual Report on Form 10-K; (iii) if not included in substance in its Quarterly Reports to Stockholders, its quarterly reports on Form 10-Q; and (iv) a full copy of the particular Registration Statement covering the Shares (the foregoing, in each case, excluding exhibits); and

(b) upon the reasonable request of a Holder, all exhibits excluded by the parenthetical to subparagraph (a) (iv) of this Section 1.5;

and APS, upon the reasonable request of a Holder, will meet with such Holder or a representative thereof at APS' headquarters to discuss all information relevant for disclosure in the Registration Statement covering the Shares and will otherwise cooperate with any Holder conducting an investigation for the purpose of reducing or eliminating such Holder's exposure to liability under the Securities Act, including the reasonable production of information at APS' headquarters.

1.6 Information Furnished by Holder. It shall be a condition precedent of APS' obligations under this Agreement that each Holder of Registrable Securities included in any Registration furnish to APS such information regarding such Holder and the distribution proposed by such Holder as APS may reasonably request.

1.7 Indemnification.

1.7.1 Company's Indemnification of Holder. APS will indemnify and hold harmless each Holder, each of its officers, directors, employees, agents, affiliates and constituent partners, and each person deemed to be in control of such Holder within the meaning of Section 15 of the Securities Act or Section 20 of the Securities Exchange Act of 1934 (the "Exchange Act"), from and against all claims, losses, damages or liabilities (or actions in respect thereof) to the extent such claims, losses, damages or liabilities arise out of or are based upon any untrue statement (or alleged untrue statement) of a material fact contained in any prospectus or other document (including any related Registration Statement) incident to any

such Registration, qualification or compliance, or are based on any omission (or alleged omission) to state therein a material fact required to be stated therein or necessary to make the statements therein not misleading, or any violation by APS of any rule or regulation promulgated under the Securities Act applicable to APS and relating to action or inaction required of APS in connection with any such Registration, qualification or compliance or arise out of any failure by APS to fulfill an undertaking included in the Registration Statement; and APS will reimburse each such Holder, each such underwriter and each person who controls any such Holder or underwriter, for any legal and any other expenses reasonably incurred in connection with defending any such claim, loss, damage, liability or action; provided, however, that the indemnity contained in this Section 1.7.1 shall not apply to amounts paid in settlement of any such claim, loss, damage, liability or action if settlement is effected without the consent of APS (which consent shall not unreasonably be withheld) and; provided, further, that APS will not be liable in any such case to the extent that any such claim, loss, damage, liability or expense arises out of or is based upon any untrue statement or omission based upon written information furnished to APS by such Holder or controlling person and stated expressly to be for use in connection with the offering of securities of APS.

1.7.2 Holder's Indemnification of Company. Each Holder will indemnify and hold harmless APS, each of its directors, officers, employees, agents and affiliates, each

person deemed to be in control of APS within the meaning of Section 15 the Securities Act or Section 20 of the Exchange Act, and each other such Holder, each of its officers, directors, employees, agents, affiliates and constituent partners, and each person deemed to be in control of such other Holder within the meaning of Section 15 of the Securities Act or Section 20 of the Exchange Act, from and against all claims, losses, damages and liabilities (or actions in respect thereof) arising out of or based upon any untrue statement (or alleged untrue statement) of a material fact contained in any such Registration Statement, prospectus, offering circular or other document, or any omission (or alleged omission) to state therein a material fact required to be stated therein or necessary to make the statements therein not misleading, or any violation by such Holder of any rule or regulation promulgated under the Securities Act applicable to such Holder and relating to action or inaction required of such Holder in connection with any such Registration, qualification or compliance; and will reimburse APS, such Holder, such directors, officers, partners, persons or control persons for any legal and any other expenses reasonably incurred in connection with defending any such claim, loss, damage, liability or action, in each case to the extent, but only to the extent, that such untrue statement (or alleged untrue statement) or omission (or alleged omission) is made in such Registration Statement, prospectus, offering circular or other document in reliance upon and in conformity with written information furnished to APS by such Holder and specifically approved in writing by such Holder for

use in connection with the offering of securities of APS; provided, however, that the indemnity contained in this Section 1.7.2 shall not apply with respect to a Holder to amounts paid in settlement of any claim, loss, damage, liability or action if settlement is effected without the consent of such Holder (which consent shall not be unreasonably delayed or withheld).

1.7.3 Indemnification Procedure. Promptly after receipt by an indemnified party under this Section 1.7 of notice of the commencement of any action, such indemnified party will, if a claim in respect thereof is to be made against an indemnifying party under this Section 1.7, notify the indemnifying party in writing of the commencement thereof and, to the extent reasonably possible, generally summarize such action. The indemnifying party shall have the right to participate in and to assume the defense of such claim; provided, however, that the indemnifying party shall be entitled to select counsel for the defense of such claim with the approval of any parties entitled to indemnification, which approval shall not be unreasonably withheld; provided, further, that if either party reasonably determines that there may be a conflict between the position of APS and a Holder in conducting the defense of such action, suit or proceeding by reason of recognized claims for indemnity under this Section 1.7, then counsel for such party shall be entitled to conduct, or participate in, the defense to the extent reasonably determined by such counsel to be necessary to protect the interest of such party and the costs of such counsel shall be borne by the indemnifying party. The failure to notify an

indemnifying party promptly of the commencement of any such action, if prejudicial to the ability of the indemnifying party to defend such action, shall relieve such indemnifying party, to the extent so prejudiced, of any liability to the indemnified party under this Section 1.7, but the omission so to notify the indemnifying party will not relieve such party of any liability that such party may have to any indemnified party otherwise other than under this Section 1.7.

1.8 Transfer of Rights. The right to cause APS to Register securities granted by APS to PURCHASER under this Agreement may be assigned by any Holder to a transferee or assignee of any Registrable Securities not sold to the public acquiring at least 25,000 shares of such Holder's Registrable Securities (equitably adjusted for any stock splits, subdivisions, stock dividends, changes, combinations or the like); provided, however, that:

(a) APS must receive written notice prior to the time of said transfer, stating the name and address of said transferee or assignee and identifying the securities with respect to which such information and Registration rights are being assigned; and

(b) the transferee or assignee of such rights must not be a person deemed by the Board of Directors of APS, in its best judgment, to be a competitor or potential competitor of APS. Notwithstanding the limitations set forth in the foregoing sentence respecting the minimum number of shares which must be transferred and permitted transferees and assignees: (i) any

Holder which is a partnership may transfer such Holder's Registration rights to such Holder's constituent partners without restriction as to the number or percentage of shares acquired by any such constituent partner; and (ii) Section 1.8(b) shall not prohibit the transfer or assignment of such rights to an affiliate of the PURCHASER.

1.9 Nasdaq Listing. Prior to the effective date of a Registration of any of the Shares, APS shall file an application with NASDAQ to list such Shares for quotation on the Nasdaq National Market.

1.10 Delay in Effectiveness. In the event a Registration Statement covering the Shares is not declared effective within ninety (90) days after the date hereof or in the event the effectiveness of such Registration Statement is suspended or terminated at any time subsequent to the 90th day after the date hereof and prior to the termination of the period specified in Section 1.4(a) hereof, APS shall pay to the Holders an amount equal to \$275 per day for each day such Registration Statement is not effective; provided that nothing herein is intended to limit a Holder's ability to seek to enforce its rights to require that a Registration Statement covering Shares remains effective during the period specified in Section 1.4 hereof; and provided further that APS shall not be required to make any payments to a Holder if the failure to obtain or maintain an effective Registration Statement is solely attributable to a Holder's failure to provide APS with

information required to be provided by such Holder for inclusion in the Registration Statement.

2. Miscellaneous.

2.1 Governing Law. This Agreement shall be governed by and construed in accordance with the laws of the State of California applicable to contracts entered into and wholly to be performed within the State of California by California residents.

2.2 Successors and Assigns. Subject to the exceptions specifically set forth in this Agreement, the terms and conditions of this Agreement shall inure to the benefit of and be binding upon the respective executors, administrators, heirs, successors and assigns of the parties.

2.3 Entire Agreement. This Agreement and the Asset Purchase Agreement and the Exhibits and Schedules hereto and thereto constitute the entire contract between APS and the PURCHASER relative to the subject matter hereof. Any previous agreement between APS and the PURCHASER with respect to the subject matter hereof is superseded by this Agreement.

2.4 Severability. Any invalidity, illegality or limitation of the enforceability with respect to any Holder of any one or more of the provisions of this Agreement, or any part thereof, whether arising by reason of the law of any PURCHASER's domicile or otherwise, shall in no way affect or impair the validity, legality or enforceability of this Agreement with respect to other Holders. In case any provision of this Agreement shall be invalid, illegal or unenforceable, it shall to the extent practicable, be modified so as to make it valid, legal

and enforceable and to retain as nearly as practicable the intent of the parties, and the validity, legality and enforceability of the remaining provisions shall not in any way be affected or impaired thereby.

2.5 Amendment of Agreement. Any provision of this Agreement may be amended only by a written instrument signed by APS and by PURCHASER.

2.6 Notices. Any notice required or permitted hereunder shall be given in writing and shall be conclusively deemed effectively given upon personal delivery, or five days after deposit in the United States mail, by registered or certified mail, postage prepaid, addressed:

(a) if to APS, Advanced Polymer Systems, Inc., 3696 Haven Avenue, Redwood City, California 94063, ATTENTION: President; and

(b) if to PURCHASER, Dow Corning Corporation, 2200 W. Salzburg Road, Midland, Michigan 48686-0994, ATTENTION: General Counsel.

2.7 Headings. The headings of the Sections of this Agreement are for convenience and shall not by themselves determine the interpretation of this Agreement.

2.8 Counterparts. This Agreement may be executed in two or more counterparts, each of which shall be deemed an original, but all of which together shall constitute one and the same instrument.

IT WITNESS WHEREOF, the parties have executed this Agreement.

ADVANCED POLYMER SYSTEMS, INC.

By:/s/ Michael O'Connell

-----  
Michael O'Connell  
Senior Vice President and CFO

DOW CORNING CORPORATION

By:/s/ William P. Cavanaugh

-----  
William P. Cavanaugh  
Commercial Unit Manager  
Personal Household and  
Automotive Products

THIS WARRANT AND THE SHARES ISSUABLE HEREUNDER HAVE NOT BEEN REGISTERED UNDER THE SECURITIES ACT OF 1933, AS AMENDED, AND MAY NOT BE SOLD, PLEDGED, OR OTHERWISE TRANSFERRED WITHOUT AN EFFECTIVE REGISTRATION THEREOF UNDER SUCH ACT OR PURSUANT TO RULE 144 OR AN OPINION OF COUNSEL REASONABLY SATISFACTORY TO THE CORPORATION AND ITS COUNSEL, THAT SUCH REGISTRATION IS NOT REQUIRED.

#### WARRANT TO PURCHASE STOCK

Corporation: ADVANCED POLYMER SYSTEMS, INC., a Delaware corporation  
Number of Shares: 32,500  
Class of Stock: Common  
Initial Exercise Price: \$7.00 per share  
Issue Date: September 27, 1995  
Expiration Date: March 27, 2000

THIS WARRANT CERTIFIES THAT, for the agreed upon value of \$1.00 and for other good and valuable consideration, VENTURE LENDING ("Holder") is entitled to purchase the number of fully paid and nonassessable shares of the class of securities (the "Shares") of the corporation (the "Company") at the initial exercise price per Share (the "Warrant Price") all as set forth above and as adjusted pursuant to Article 2 of this Warrant, subject to the provisions and upon the terms and conditions set forth of this Warrant.

#### ARTICLE 1. EXERCISE

1.1 Method of Exercise. Holder may exercise this Warrant by delivering a duly executed Notice of Exercise in substantially the form attached as Appendix 1 to the principal office of the Company. Unless Holder is exercising the conversion right set forth in Section 1.2, Holder shall also deliver to the Company a check for the aggregate Warrant Price for the Shares being purchased.

1.2 Conversion Right. In lieu of exercising this Warrant as specified in Section 1.1, Holder may from time to time convert this Warrant, in whole or in part, into a number of Shares determined by dividing (a) the aggregate fair market value of the Shares or other securities otherwise issuable upon exercise of this Warrant minus the aggregate Warrant Price of such Shares by (b) the fair market value of one Share. The fair market value of the Shares shall be determined pursuant Section 1.4.

1.3 Fair Market Value. If the Shares are traded in a public market, the fair market value of the Shares shall be the closing price of the Shares (or the closing price of the Company's stock into which the Shares are convertible) reported for the business day immediately before Holder delivers its Notice of Exercise to the Company. If the Shares are not traded in a public market, the Board of Directors of the Company shall determine fair market value in its reasonable good faith judgment. The foregoing notwithstanding, if Holder advises the Board of Directors in writing that Holder disagrees with such determination, then the Company and Holder shall promptly agree upon a reputable investment banking firm to undertake such valuation. If the valuation of such investment banking firm is greater than that determined by the Board of Directors, then all fees and

expenses of such investment banking firm shall be paid by the Company. In all other circumstances, such fees and expenses shall be paid by Holder.

1.4 Delivery of Certificate and New Warrant. Promptly after Holder exercises or converts this Warrant, the Company shall deliver to Holder certificates for the Shares acquired and, if this Warrant has not been fully exercised or converted and has not expired, a new Warrant representing the Shares not so acquired.

1.5 Replacement of Warrants. On receipt of evidence reasonably satisfactory to the Company of the loss, theft, destruction or mutilation of this Warrant and, in the case of loss, theft or destruction, on delivery of an indemnity agreement reasonably satisfactory in form and amount to the Company or, in case of mutilation, or surrender and cancellation of this Warrant, the Company at its expense shall execute and deliver, in lieu of this Warrant, a new warrant of like tenor.

1.6 Repurchase on Sale, Merger, or Consolidation of the Company.

1.6.1 "Acquisition". For the purpose of this Warrant, "Acquisition" means any sale, license, or other disposition of all or substantially all of the assets of the Company, or any reorganization, consolidation, or merger of the Company where the holders of the Company's securities before the transaction beneficially own less than 50% of the outstanding voting securities of the surviving entity after the transaction.

1.6.2 Assumption of Warrant. If upon the closing of any Acquisition the successor entity assumes the obligations of this Warrant, then this Warrant shall be exercisable for the same securities, cash, and property as would be payable for the Shares issuable upon exercise of the unexercised portion of this Warrant as if such Shares were outstanding on the record date for the Acquisition and subsequent closing. The Warrant Price shall be adjusted accordingly.

1.6.3 Nonassumption. If upon the closing of any Acquisition the successor entity does not assume the obligations of his Warrant and Holder has not otherwise exercised this Warrant in full, then the unexercised portion of this Warrant shall be deemed to have been automatically converted pursuant to Section 1.2 and thereafter Holder shall participate in the acquisition on the same terms as other holders of the same class of securities of the Company.

1.6.4 Purchase Right. Notwithstanding the foregoing, at the election of Holder, the Company shall purchase the unexercised portion of this Warrant for cash upon the closing of any Acquisition for an amount equal to (a) the fair market value of any consideration that would have been received by Holder in consideration of the Shares had Holder exercised the unexercised portion of this Warrant immediately before the record date for determining the shareholders entitled to participate in the proceeds of the Acquisition, less (b) the aggregate Warrant Price of the Shares, but in no event less than zero.

## ARTICLE 2. ADJUSTMENTS TO THE SHARES

2.1 Stock Dividends, Splits, Etc. If the Company declares or pays a dividend on its common stock (or the Shares if the Shares are securities other than common stock) payable in common stock, or other securities, subdivides the outstanding common

stock into a greater amount of common stock, or, if the Shares are securities other than common stock, subdivides the Shares in a transaction that increases the amount of common stock into which the Shares are convertible, then upon exercise of this Warrant, for each Share acquired, Holder shall receive, without cost to Holder, the total number and kind of securities to which Holder would have been entitled had Holder owned the Shares of record as of the date the dividend or subdivision occurred.

2.2 Reclassification, Exchange or Substitution. Upon any reclassification, exchange, substitution, or other event that results in a change of the number and/or class of the securities issuable upon exercise or conversion of this Warrant, Holder shall be entitled to receive, upon exercise or conversion of this Warrant, the number and kind of securities and property that Holder would have received for the Shares if this Warrant had been exercised immediately before such reclassification, exchange, substitution, or other event. Such an event shall include any automatic conversion of the outstanding or issuable securities of the Company of the same class or series as the Shares to common stock pursuant to the terms of the Company's Articles of Incorporation upon the closing of a registered public offering of the Company's common stock. The Company or its successor shall promptly issue to Holder a new Warrant for such new securities or other property. The new Warrant shall provide for adjustments which shall be as nearly equivalent as may be practicable to the adjustments provided for in this Article 2 including, without limitation, adjustments to the Warrant Price and to the number of securities or property issuable upon exercise of the new Warrant. The provisions of this Section 2.2 shall similarly apply to successive reclassifications, exchanges, substitutions, or other events.

2.3 Adjustments for Combinations, Etc. If the outstanding Shares are combined or consolidated, by reclassification or otherwise, into a lesser number of shares, the Warrant Price shall be proportionately increased.

2.4 Adjustments for Diluting Issuances. The Warrant Price and the number of Shares issuable upon exercise of this Warrant or, if the Shares are Preferred Stock, the number of shares of common stock issuable upon conversion of the Shares, shall be subject to adjustment, from time to time in the manner set forth on Exhibit A in the event of Diluting Issuances (as defined on Exhibit A).

2.5 No Impairment. The Company shall not, by amendment of its Articles of Incorporation or through a reorganization, transfer of assets, consolidation, merger, dissolution, issue, or sale of securities or any other voluntary action, avoid or seek to avoid the observance or performance of any of the terms to be observed or performed under this Warrant by the Company, but shall at all times in good faith assist in carrying out of all the provisions of this Article 2 and in taking all such action as may be necessary or appropriate to protect Holder's rights under this Article against impairment. If the Company takes any action affecting the Shares or its common stock other than as described above that adversely affects Holder's rights under this Warrant, the Warrant Price shall be adjusted downward and the number of Shares issuable upon exercise of this Warrant shall be adjusted upward in such a manner that the aggregate Warrant Price of this Warrant is unchanged.

2.6 Fractional Shares. No fractional Shares shall be issuable upon exercise or conversion of the Warrant and the number of Shares to be issued shall be rounded down to the nearest whole Share. If a fractional share interest arises upon any exercise or conversion of the Warrant, the Company shall eliminate such fractional share interest by

paying Holder amount computed by multiplying the fractional interest by the fair market value of a full share.

2.7 Certificate as to Adjustments. Upon each adjustment of the Warrant Price, the Company at its expense shall promptly compute such adjustment, and furnish Holder with a certificate of its Chief Financial Officer setting forth such adjustment and the facts upon which such adjustment is based. The Company shall, upon written request, furnish Holder a certificate setting forth the Warrant Price in effect upon the date thereof and the series of adjustments leading to such Warrant Price.

#### ARTICLE 3. REPRESENTATIONS AND COVENANTS OF THE COMPANY.

3.1 Representations and Warranties. The Company hereby represents and warrants to the Holder as follows:

(a) All Shares which may be issued upon the exercise of the purchase right represented by this Warrant, and all securities, if any, issuable upon conversion of the Shares, shall, upon issuance, be duly authorized, validly issued, fully paid and nonassessable, and free of any liens and encumbrances except for restrictions on transfer provided for herein or under applicable federal and state securities laws.

3.2 Notice of Certain Events. If the Company proposes at any time (a) to declare any dividend or distribution upon its common stock, whether in cash, property, stock, or other securities and whether or not a regular cash dividend; (b) to offer for subscription pro rata to the holders of any class or series of its stock any additional shares of stock of any class or series or other rights; (c) to effect any reclassification or recapitalization of common stock; (d) to merge or consolidate with or into any other corporation, or sell, lease, license, or convey all or substantially all of its assets, or to liquidate, dissolve or wind up; or (e) offer holders of registration rights the opportunity to participate in an underwritten public offering of the company's securities for cash, then, in connection with each such event, the Company shall give Holder (1) at least 20 days prior written notice of the date on which a record will be taken for such dividend, distribution or subscription rights (and specifying the date on which the holders of common stock will be entitled thereto) or for determining rights to vote, if any, in respect of the matters referred to in (c) and (d) above; (2) in the case of the matters referred to in (c) and (d) above at least 20 days prior written notice of the date when the same will take place (and specifying the date on which the holders of common stock will be entitled to exchange their common stock for securities or other property deliverable upon the occurrence of such event); and (3) in the case of the matter referred to in (e) above, the same notice as is given to the holders of such registration rights.

3.3 Information Rights. So long as the Holder holds this Warrant and/or any of the Shares, the Company shall deliver to the Holder (a) promptly after mailing, copies of all notices or other written communications to the shareholders of the Company, (b) within ninety (90) days after the end of each fiscal year of the Company, the annual audited financial statements of the Company certified by independent public accountants of

recognized standing and (c) within forty-five (45) days after the end of each of the first three quarters of each fiscal year, the Company's quarterly, unaudited financial statements.

3.4 Registration Under Securities Act of 1933, as amended. The Company agrees that the Shares or, if the Shares are convertible into common stock of the Company, such common stock, shall be subject to the registration rights set forth on Exhibit B, if attached.

#### ARTICLE 4. MISCELLANEOUS

4.1 Term; Notice of Expiration. This Warrant is exercisable, in whole or in part, at any time and from time to time on or before the Expiration Date set forth above. The Company shall give Holder written notice of Holder's right to exercise this Warrant in the form attached as Appendix 2 not more than 90 days and not less than 30 days before the Expiration Date. If the notice is not so given, the Expiration Date shall automatically be extended until 30 days after the date the Company delivers the notice to Holder.

4.2 Legends. This Warrant and the Shares (and the securities issuable, directly or indirectly, upon conversion of the Shares, if any) shall be imprinted with a legend in substantially the following form:

THIS SECURITY HAS NOT BEEN REGISTERED UNDER THE SECURITIES ACT OF 1933, AS AMENDED, AND MAY NOT BE SOLD, PLEDGED OR OTHERWISE TRANSFERRED WITHOUT AN EFFECTIVE REGISTRATION THEREOF UNDER SUCH ACT OR PURSUANT TO RULE 144 OR AN OPINION OF COUNSEL REASONABLY SATISFACTORY TO THE CORPORATION AND ITS COUNSEL THAT SUCH REGISTRATION IS NOT REQUIRED.

4.3 Compliance with Securities Laws on Transfer. This Warrant and the Shares issuable upon exercise of this Warrant (and the securities issuable, directly or indirectly, upon conversion of the Shares, if any) may not be transferred or assigned in whole or in part without compliance with applicable federal and state securities laws by the transferor and the transferee (including, without limitation, the delivery of investment representation letters and legal opinions reasonably satisfactory to the Company, as reasonably requested by the Company). The Company shall not require Holder to provide an opinion of counsel if the transfer is to an affiliate of Holder or if there is no material question as to the availability of current information as referenced in Rule 144(c), Holder represents that it has complied with Rule 144(d) and (e) in reasonable detail, the selling broker represents that it has complied with Rule 144(f), and the Company is provided with a copy of Holder's notice of proposed sale.

4.4 Transfer Procedure. Subject to the provisions of Section 4.2, Holder may transfer all or part of this Warrant or the Shares issuable upon exercise of this Warrant (or the securities issuable, directly or indirectly, upon conversion of the Shares, if any) by giving the Company notice of the portion of the Warrant being transferred setting forth the name, address and taxpayer identification number of the transferee and surrendering this Warrant to the Company for reissuance to the transferee(s) (and Holder if applicable). Unless the Company is filing financial information with the SEC pursuant to the Securities Exchange

Act of 1934, the Company shall have the right to refuse to transfer any portion of this Warrant to any person who directly competes with the Company.

4.5 Notices. All notices and other communications from the Company to the Holder, or vice versa, shall be deemed delivered and effective when given personally or mailed by first-class registered or certified mail, postage prepaid, at such address as may have been furnished to the Company or the Holder, as the case may be, in writing by the Company or such holder from time to time.

4.6 Waiver. This Warrant and any term hereof may be changed, waived, discharged or terminated only by an instrument in writing signed by the party against which enforcement of such change, waiver, discharge or termination is sought.

4.7 Attorneys Fees. In the event of any dispute between the parties concerning the terms and provisions of this Warrant, the party prevailing in such dispute shall be entitled to collect from the other party all costs incurred in such dispute, including reasonable attorneys' fees.

4.8 Governing Law. This Warrant shall be governed by and construed in accordance with the laws of the State of California, without giving effect to its principles regarding conflicts of law.

"COMPANY"  
ADVANCED POLYMER SYSTEMS, INC.

By /s/ JOHN J. MEAKEM, JR.

Name John J. Meakem, Jr.  
(Print)

Title: Chairman of the Board, President,  
or Vice President

By /s/ MICHAEL P.J. O'CONNELL

Name Michael P.J. O'Connell  
(Print)

Title: Chief Financial Officer, Secretary  
Assistant Treasurer, or Assistant  
Secretary

APPENDIX 1

NOTICE OF EXERCISE

1. The undersigned hereby elects to purchase \_\_\_\_\_ shares of the Common Stock of ADVANCED POLYMER SYSTEMS, INC. pursuant to the terms of the attached Warrant, and tenders herewith payment of the purchase price of such shares in full.

1. The undersigned hereby elects to convert the attached Warrant into Shares/cash [strike one] in the manner specified in the Warrant. This conversion is exercised with respect to \_\_\_\_\_ of the Shares covered by the Warrant.

[Strike paragraph that does not apply.]

2. Please issue a certificate or certificates representing said shares in the name of the undersigned or in such other name as is specified below:

Venture Lending  
Three Palo Alto Square, Suite 150  
Palo Alto, CA 94306

3. The undersigned represents it is acquiring the shares solely for its own account and not as a nominee for any other party and not with a view toward the resale or distribution thereof except in compliance with applicable securities laws.

\_\_\_\_\_  
(Signature)

\_\_\_\_\_  
(Date)

APPENDIX 2

Notice that Warrant Is About to Expire

\_\_\_\_\_ / \_\_\_\_\_

Venture Lending  
Three Palo Alto Square, Suite 150  
Palo Alto, CA 94306

Attn: Chief Financial Officer

Dear: \_\_\_\_\_

This is to advise you that the Warrant issued to you described below will expire on \_\_\_\_\_, 19\_\_.

Issuer: ADVANCED POLYMER SYSTEMS, INC.

Issue Date: September 27, 1995

Class of Security Issuable: Common

Exercise Price per Share: \$7.00

Number of Shares Issuable: 32,500

Procedure for Exercise:

Please contact [name of contact person at (phone number)] with any questions you may have concerning exercise of the Warrant. This is your only notice of pending expiration.

\_\_\_\_\_  
(Name of Issuer)

By \_\_\_\_\_

Its \_\_\_\_\_

## EXHIBIT A

## Anti-Dilution Provisions

In the event of the issuance (a "Diluting Issuance") by the Company, after the Issue Date of the Warrant, of securities at a price per share less than the Warrant Price, then the number of shares of common stock issuable upon conversion of the Shares, or if the Shares are common stock, the number of Shares issuable upon exercise of the Warrant, shall be adjusted as a result of Diluting Issuances in accordance with the Holder's standard form of Anti-Dilution Agreement in effect on the Issue Date.

Under no circumstances shall the aggregate Warrant Price payable by the Holder upon exercise of the Warrant increase as a result of any adjustment arising from a Diluting Issuance.

## EXHIBIT B

## Registration Rights

## VENTURE LENDING

## REGISTRATION RIGHTS AGREEMENT

THIS REGISTRATION RIGHTS AGREEMENT is entered into as of September 27, 1995, by and between Venture Lending ("Purchaser") and the Company whose name appears on the last page of this Agreement.

## RECITALS

A. Concurrently with the execution of this Agreement, the Purchaser is purchasing from the Company a Warrant to Purchase Stock and Warrant to Purchase Additional Stock (the "Warrants") pursuant to which Purchaser has the right to acquire from the Company the Shares (as defined in the Warrants).

B. By this Agreement, the Purchaser and the Company desire to set forth the registration rights of the Shares all as provided herein.

NOW, THEREFORE, in consideration of the mutual promises, covenants and conditions hereinafter set forth, the parties hereto mutually agree as follows:

1. Registration Rights. The Company covenants and agrees as follows:

1.1 Definitions. For purposes of this Section 1:

(a) The term "register," "registered," and "registration" refer to a registration effected by preparing and filing a registration statement or similar document in compliance with the Securities Act of 1933, as amended (the "Securities Act"), and the declaration or ordering of effectiveness of such registration statement or document;

(b) the term "Registrable Securities" means (i) the Shares (if Common Stock) or all shares of Common Stock of the Company issuable or issued upon conversion of the Shares and (ii) any Common Stock of the Company issued as (or issuable upon the conversion or exercise of any warrants, right or other security which is issued as) a dividend or other distribution with respect to, or in exchange for or in replacement of, any stock referred to in (i).

(c) The terms "Holder" or "Holders" means the Purchaser or qualifying transferees under subsection 1.8 hereof who hold Registrable Securities.

(d) The term "SEC" means the Securities and Exchange Commission.

1.2 Company Registration.

(a) Registration. If at any time or from time to time, the Company shall determine to register any of its securities, for its own account or the account of any of its shareholders, other than a registration on Form S-1 or S-8 relating solely to employee stock option or purchase plans, or a registration on Form S-4 relating solely to an SEC Rule 145 transaction, or a registration on any other form (other than Form S-1, S-2, S-3 or S-18, or their successor forms) or any successor to

such forms, which does not include substantially the same information as would be required to be included in a registration statement covering the sale of Registrable Securities, the Company will:

(i) promptly give to each Holder written notice thereof (which shall include a list of the jurisdictions in which the Company intends to attempt to qualify such securities under the applicable blue sky or other state securities laws); and

(ii) include in such registration (and compliance), and in any underwriting involved therein, all the Registrable Securities specified in a written request or requests, made within 30 days after receipt of such written notice from the Company, by any Holder or Holders, except as set forth in subsection 1.2(b) below.

(b) Underwriting. If the registration of which the Company gives notice is for a registered public offering involving an underwriting, the Company shall so advise the Holders as a part of the written notice given pursuant to subsection 1.2(a)(i). In such event the right of any Holder to registration pursuant to this subsection 1.2 shall be conditioned upon such Holder's participation in such underwriting and the inclusion of such Holder's Registrable Securities in the underwriting to the extent provided herein. All Holders proposing to distribute their securities through such underwriting shall (together with the Company and the other shareholders distributing their securities through such underwriting) enter into an underwriting agreement in customary form with the underwriter or underwriters selected for such underwriting by the Company.

1.3 Expenses of Registration. All expenses incurred in connection with any registration, qualification or compliance pursuant to this Section 1 including without limitation, all registration, filing and qualification fees, printing expenses, fees and disbursements of counsel for the Company and expenses of any special audits incidental to or required by such registration, shall be borne by the Company except the Company shall not be required to pay underwriters' fees, discounts or commissions relating to Registrable Securities. All expenses of any registered offering not otherwise borne by the Company shall be borne pro rata among the Holders participating in the offering and the Company.

1.4 Registration Procedures. In the case of each registration, qualification or compliance effected by the Company pursuant to this Registration Rights Agreement, the Company will keep each Holder participating therein advised in writing as to the initiation of each registration, qualification and compliance and as to the completion thereof. Except as otherwise provided in subsection 1.3, at its expense the Company will:

(a) Prepare and file with the SEC a registration statement with respect to such Registrable Securities and use its best efforts to cause such registration statement to become effective, and, upon the request of the Holders of a majority of the Registrable Securities registered thereunder, keep such registration statement effective for up to 120 days.

(b) Prepare and file with the SEC such amendments and supplements to such registration statement and the prospectus used in connection with such registration statement as may be necessary to comply with the provisions of the Securities Act with respect to the disposition of all securities covered by such registration statement.

(c) Furnish to the Holders such numbers of copies of a prospectus, including a preliminary prospectus, in conformity with the requirements of the Securities Act, and such other documents as they may reasonably request in order to facilitate the disposition of Registrable Securities owned by them.

(d) Use its best efforts to register and qualify the securities covered by such registration statement under such other securities or Blue Sky laws of such jurisdictions as shall be reasonably requested by the Holders, provided that the Company shall not be required in

connection therewith or as a condition thereto to qualify to do business or to file a general consent to service of process in any such states or jurisdictions.

(e) In the event of any underwritten public offering, enter into and perform its obligations under an underwriting agreement, in usual and customary form, with the managing underwriter of such offering. Each Holder participating in such underwriting shall also enter into and perform its obligations under such an agreement.

(f) Notify each Holder of Registrable Securities covered by such registration statement at any time when a prospectus relating thereto is required to be delivered under the Securities Act or the happening of any event as a result of which the prospectus included in such registration statement, as then in effect, includes an untrue statement of a material fact or omits to state a material fact required to be stated therein or necessary to make the statements therein not misleading in the light of the circumstances then existing.

#### 1.5 Indemnification.

(a) The Company will indemnify each Holder of Registrable Securities and each of its officers, directors and partners, and each person controlling such Holder, with respect to which such registration, qualification or compliance has been effected pursuant to this Rights Agreement, and each underwriter, if any, and each person who controls any underwriter of the Registrable Securities held by or issuable to such Holder, against all claims, losses, expenses, damages and liabilities (or actions in respect thereto) arising out of or based on any untrue statement (or alleged untrue statement) of a material fact contained in any prospectus, offering circular or other document (including any related registration statement, notification or the like) incident to any such registration, qualification or compliance, or based on any omission (or alleged omission) to state therein a material fact required to be stated therein or necessary to make the statement therein not misleading, or any violation or alleged violation by the Company of the Securities Act, the Securities Exchange Act of 1934, as amended, ("Exchange Act") or any state securities law applicable to the Company or any rule or regulation promulgated under the Securities Act, the Exchange Act or any such state law and relating to action or inaction required of the Company in connection with any such registration, qualification of compliance, and will reimburse each such Holder, each of its officers, directors and partners, and each person controlling such Holder, each such underwriter and each person who controls any such underwriter, within a reasonable amount of time after incurred for any reasonable legal and any other expenses incurred in connection with investigating, defending or settling any such claim, loss, damage, liability or action; provided, however, that the indemnity agreement contained in this subsection 1.5(a) shall not apply to amounts paid in settlement of any such claim, loss, damage, liability, or action if such settlement is effected without the consent of the Company (which consent shall not be unreasonably withheld); and provided further, that the Company will not be liable in any such case to the extent that any such claim, loss, damage or liability arises out of or is based on any untrue statement or omission based upon written information furnished to the Company by an instrument duly executed by such Holder or underwriter specifically for use therein.

(b) Each Holder will, if Registrable Securities held by or issuable to such Holder are included in the securities as to which such registration, qualification or compliance is being effected, indemnify the Company, each of its directors and officers, each underwriter, if any, of the Company's securities covered by such a registration statement, each person who controls the Company within the meaning of the Securities Act, and each other such Holder, each of its officers, directors and partners and each person controlling such Holder, against all claims, losses, expenses, damages and liabilities (or actions in respect thereof) arising out of or based on any untrue statement (or alleged untrue statement) of a material fact contained in any such registration statement, prospectus, offering circular or other document, or any omission (or alleged omission) to state therein a material fact required to be stated therein or necessary to make the statements therein not misleading, and will reimburse the Company, such Holders, such directors, officers, partners, persons

or underwriters for any reasonable legal or any other expenses incurred in connection with investigating, defending or settling any such claim, loss, damage, liability or action, in each case to the extent, but only to the extent, that such untrue statement (or alleged untrue statement) or omission (or alleged omission) is made in such registration statement, prospectus, offering circular or other document in reliance upon and in conformity with written information furnished to the Company by an instrument duly executed by such Holder specifically for use therein; provided, however, that the indemnity agreement contained in this subsection 1.5(b) shall not apply to amounts paid in settlement of any such claim, loss, damage, liability or action if such settlement is effected without the consent of the Holder, (which consent shall not be unreasonably withheld); and provided further, that the total amount for which any Holder shall be liable under this subsection 1.5(b) shall not in any event exceed the aggregate proceeds received by such Holder from the sale of Registrable Securities held by such Holder in such registration.

(c) Each party entitled to indemnification under this subsection 1.5 (the "Indemnified Party") shall give notice to the party required to provide indemnification (the "Indemnifying Party") promptly after such Indemnified Party has actual knowledge of any claim as to which indemnity may be sought, and shall permit the Indemnifying Party to assume the defense of any such claim or any litigation resulting therefrom; provided that counsel for the Indemnifying Party, who shall conduct the defense of such claim or litigation, shall be approved by the Indemnified Party (whose approval shall not be unreasonably withheld), and the Indemnified Party may participate in such defense at such party's expense; and provided further, that the failure of any Indemnified Party to give notice as provided herein shall not relieve the Indemnifying Party of its obligations hereunder, unless such failure resulted in prejudice to the Indemnifying Party; and provided further, than an Indemnified Party (together with all other Indemnified Parties which may be represented without conflict by one counsel) shall have the right to retain one separate counsel, with the fees and expenses to be paid by the Indemnifying Party, if representation of such Indemnified Party by the counsel retained by the Indemnifying Party would be inappropriate due to actual or potential differing interests between such Indemnified Party and any other party represented by such counsel in such proceeding. No Indemnifying Party, in the defense of any such claim or litigation, shall, except with the consent of each Indemnified Party, consent to entry of any judgment or enter into any settlement which does not include as an unconditional term thereof the giving by the claimant or plaintiff to such Indemnified Party of a release from all liability in respect to such claim or litigation.

1.6 Information by Holder. Any Holder or Holders of Registrable Securities included in any registration shall promptly furnish to the Company such information regarding such Holder or Holders and the distribution proposed by such Holder or Holders as the Company may request in writing and as shall be required in connection with any registration, qualification or compliance referred to herein.

1.7 Rule 144 Reporting. With a view to making available to Holders the benefits of certain rules and regulations of the SEC which may permit the sale of the Registrable Securities to the public without registration, the Company agrees at all times to:

(a) make and keep public information available, as those terms are understood and defined in SEC Rule 144, after 90 days after the effective date of the first registration filed by the Company for an offering of its securities to the general public;

(b) file with the SEC in a timely manner all reports and other documents required of the Company under the Securities Act and the Exchange Act (at any time after it has become subject to such reporting requirements); and

(c) so long as a Holder owns any Registrable Securities, to furnish to such Holder forthwith upon request a written statement by the Company as to its compliance with the reporting requirements of said Rule 144 (at any time after 90 days after the effective date of the first registration statement filed by the Company for an offering of its securities to the general public) and

of the Securities Act and the Exchange Act (at any time after it has become subject to such reporting requirements), a copy of the most recent annual or quarterly report of the Company, and such other reports and documents so filed by the Company as the Holder may reasonably request in complying with any rule or regulation of the SEC allowing the Holder to sell any such securities without registration.

1.8 Transfer of Registration Rights. Holders' rights to cause the Company to register their securities and keep information available, granted to them by the Company under subsections 1.2 and 1.7 may be assigned to a transferee or assignee of a Holder's Registrable Securities not sold to the public, provided, that the Company is given written notice by such Holder at the time of or within a reasonable time after said transfer, stating the name and address of said transferee or assignee and identifying the securities with respect to which such registration rights are being assigned. The Company may prohibit the transfer of any Holders' rights under this subsection 1.8 to any proposed transferee or assignee who the Company reasonably believes is a competitor of the Company.

## 2. General.

2.1 Waivers and Amendments. With the written consent of the record or beneficial holders of at least a majority of the Registrable Securities, the obligations of the Company and the rights of the Holders of the Registrable Securities under this agreement may be waived (either generally or in a particular instance, either retroactively or prospectively, and either for a specified period of time or indefinitely), and with the same consent the Company, when authorized by resolution of its Board of Directors, may enter into a supplementary agreement for the purpose of adding any provisions to or changing in any manner or eliminating any of the provisions of this Agreement; provided, however, that no such modification, amendment or waiver shall reduce the aforesaid percentage of Registrable Securities without the consent of all of the Holders of the Registrable Securities. Upon the effectuation of each such waiver, consent, agreement of amendment or modification, the Company shall promptly give written notice thereof to the record holders of the Registrable Securities who have not previously consented thereto in writing. This Agreement or any provision hereof may be changed, waived, discharged or terminated only by a statement in writing signed by the party against which enforcement of the change, waiver, discharge or termination is sought, except to the extent provided in this subsection 2.1.

2.2 Governing Law. This Agreement shall be governed in all respects by the laws of the State of California as such laws are applied to agreements between California residents entered into and to be performed entirely within California.

2.3 Successors and Assigns. Except as otherwise expressly provided herein, the provisions hereof shall inure to the benefit of, and be binding upon, the successors, assigns, heirs, executors and administrators of the parties hereto.

2.4 Entire Agreement. Except as set forth below, this Agreement and the other documents delivered pursuant hereto constitute the full and entire understanding and agreement between the parties with regard to the subjects hereof and thereof.

2.5 Notices, etc. All notices and other communications required or permitted hereunder shall be in writing and shall be mailed by first class mail, postage prepaid, certified or registered mail, return receipt requested, addressed (a) if to Holder, at such Holder's address as set forth below, or at such other address as such Holder shall have furnished to the Company in writing, or (b) if to the Company, at the Company's address set forth below, or at such other address as the Company shall have furnished to the Holder in writing.

2.6 Severability. In case any provision of this Agreement shall be invalid, illegal, or unenforceable, the validity, legality and enforceability of the remaining provisions of this

Agreement or any provision of the other Agreements shall not in any way be affected or impaired thereby.

2.7 Titles and Subtitles. The titles of the sections and subsections of this Agreement are for convenience of reference only and are not to be considered in construing this Agreement.

2.8 Counterparts. This Agreement may be executed in any number of counterparts, each of which shall be an original, but all of which together shall constitute one instrument.

PURCHASER  
VENTURE LENDING, a Division of  
CUPERTINO NATIONAL BANK & TRUST  
By: \_\_\_\_\_  
Name: \_\_\_\_\_  
                    (Print)  
Title: \_\_\_\_\_  
Address: \_\_\_\_\_  
          \_\_\_\_\_  
          \_\_\_\_\_

COMPANY  
ADVANCED POLYMER SYSTEMS, INC.  
By: \_\_\_\_\_  
Name: \_\_\_\_\_  
                    (Print)  
Title: Chairman of the Board,  
          President or Vice President  
Address: \_\_\_\_\_  
          \_\_\_\_\_  
          \_\_\_\_\_

## EXHIBIT 4.4

THESE SECURITIES REPRESENTED HEREBY HAVE NOT BEEN REGISTERED UNDER THE SECURITIES ACT OF 1933, AS AMENDED. SUCH SECURITIES MAY NOT BE TRANSFERRED, UNLESS A REGISTRATION STATEMENT UNDER THE ACT IS IN EFFECT AS TO SUCH TRANSFER OR, IN THE OPINION OF COUNSEL TO THE ISSUER, AN EXEMPTION FROM REGISTRATION IS THEN AVAILABLE.

## WARRANT

VOID AFTER 5:00 P.M., California Time, on March 27, 2000

WARRANT TO PURCHASE COMMON STOCK  
OF  
ADVANCED POLYMER SYSTEMS, INC.

This is to certify that subject to the terms and conditions hereof, FOR VALUE RECEIVED, 1-- (the "Initial Holder") or registered assigns (collectively referred to as the "Holder") is entitled to purchase 2-- shares (as such number may be adjusted pursuant hereto) (the "Warrant Shares") of the Common Stock (the "Common Stock") of Advanced Polymer Systems, Inc., a Delaware corporation (the "Company"), at any time during the period from November 30, 1995 (the "Commencement Date") to 5:00 P.M., California Time, on March 27, 2000, at which time this Warrant will expire and become void. The exercise price is \$7.00 per share, as such price may be adjusted pursuant hereto (the "Exercise Price").

This Warrant is issued pursuant to the provisions of the Subordinated Loan Agreement dated November 27, 1995 (the "Agreement") and shall be subject to, and the Holder shall be bound by, all terms, conditions and provisions of the Agreement. Additionally, the following terms shall apply to this Warrant:

1. Exercise of Warrant, Reservation of Shares.

1.1 Subject to the terms and conditions hereof, this Warrant may be exercised in whole or in part at any time and from time to time on or after the Commencement Date, and before 5:00 P.M., California Time, on March 27, 2000, or if such day is a day on which federal or state chartered bank institutions located in the State of California are authorized by law to close, then on the next succeeding day which shall not be such a day, by presentation and surrender hereof to the Company at its principal office or at the office of its warrant transfer agent, if any, with the attached Purchase Form duly executed and accompanied by payment, in cash or certified or official bank check payable to the order of the Company, of the Exercise Price for the number of Warrant Shares specified in such form. If this Warrant should be exercised in part only, the Company will, upon presentation of this Warrant upon such exercise, execute and deliver a new warrant, dated the date hereof, evidencing the

rights of the Holder thereof to purchase the balance of the Warrant Shares purchasable hereunder upon the same terms and conditions as herein set forth. Upon and as of such receipt of this Warrant and the Purchase Form by the Company at its office, in proper form for exercise and accompanied by payment as herein provided, the Holder shall be deemed to be the holder of record of the Warrant Shares issuable upon such exercise, notwithstanding that the stock transfer books of the Company shall then be closed or that certificates representing the Warrant Shares shall not then be actually delivered to the Holder. The Company shall promptly take such reasonable steps as it deems necessary in order to issue the Warrant Shares to be delivered following exercise of this Warrant.

1.2 The Company shall at all times after the Commencement Date and until expiration of this Warrant reserve for issuance and delivery upon exercise of this Warrant the number of Warrant Shares as shall be required for issuance and delivery upon exercise of this Warrant.

2. Fractional Shares.

No fractional shares or scrip representing fractional shares shall be issued upon the exercise of this Warrant. With respect to any fractional shares called for upon exercise hereof, the Company will pay to the Holder an amount in cash equal to such fraction multiplied by the closing sales price for a share of Common Stock, or the closing bid price if no sales were reported, as quoted on the Nasdaq National Market.

3. Transfer in Compliance with the Securities Act of 1933; Exchange, Assignment or Loss of Warrant.

3.1 This Warrant may not be assigned or transferred, except as provided herein, and in accordance with and subject to the provisions of the Securities Act of 1933, as amended, and the Rules and Regulations promulgated thereunder (said Act and such Rules and Regulations being hereinafter collectively referred to as the "Act"). Any purported transfer or assignment made other than in accordance with this Section 3 shall be null and void and of no force and effect.

3.2 This Warrant or the Warrant Shares may not be sold or otherwise disposed of except as follows:

(a) To a person who, in the opinion of counsel reasonably satisfactory to the Company, is a person to whom this Warrant or the Warrant Shares may be legally transferred without registration and without the delivery of a current prospectus under the Act, as well as applicable state securities laws with respect thereto and then only against receipt of an agreement of such person to comply with the provisions of this Section 3.2 with respect to any resale or other disposition of such securities unless, in the opinion of counsel to the Company, such agreement is not required; or

(b) Upon delivery of a prospectus or offering circular then meeting the requirements of the Act as well as applicable state securities laws relating to such securities and the offering thereof for such sale or disposition.

3.3 Each certificate for Warrant Shares or for any other security issued or issuable upon exercise of this Warrant shall contain a legend on the face, in form and substance satisfactory to counsel for the Company, setting forth the restrictions on transfer contained in Section 3.1, unless, in the opinion of counsel reasonably satisfactory to the Company, such legend is not required.

3.4 Each holder of the Warrant, the Warrant Shares and any other security issued or issuable upon exercise of this Warrant shall indemnify and hold harmless the Company, its directors and officers, and each other person, if any, who controls the Company against any losses, claims, damages or liabilities, joint or several, to which the Company or any such director, officer or any such person may become subject under the Act, any applicable state securities law or any other statute or at common law, insofar as such losses, claims, damages or liabilities (or actions in respect thereof) directly arise out of or are based upon the disposition by such holder of the Warrant, Warrant Shares or other such securities in violation of the above representation.

3.5 Subject to the provisions of Sections 3.1 through 3.4, this Warrant is exchangeable, without expense, at the option of the Holder, for other warrants of different denominations entitling the Holder to purchase in the aggregate the same number of Warrant Shares purchasable on the same terms and conditions, upon presentation at the principal office of the Company or at the office of its warrant transfer agent, if any, together with a written notice signed by the Holder specifying the names and denominations in which new warrants are to be issued, and may be divided or combined with other warrants which carry the same rights, upon presentation at the principal office of the Company or at the office of its warrant transfer agent, if any, together with a written notice signed by the Holder specifying the names and denominations in which new warrants are to be issued.

3.6 Any assignment permitted under this Warrant will be made by surrender of this Warrant to the Company at its principal office or at the office of its warrant transfer agent, if any, with the attached Assignment Form duly executed and accompanied by funds sufficient to pay any transfer tax. In such event the Company will, without charge, execute and deliver a new Warrant in the name of the assignee named in such instrument of assignment, and this Warrant will promptly be canceled.

3.7 Upon receipt by the Company of evidence satisfactory to it of the loss, theft, destruction or mutilation of this Warrant, and (in the case of loss, theft or destruction) of reasonably satisfactory indemnification, and upon surrender

and cancellation of this Warrant, if mutilated, the Company will execute and deliver a new Warrant of like tenor and date and any such lost, stolen, or destroyed Warrant shall thereupon become void.

4. Adjustment of Number of Warrant Shares and Exercise Price.

4.1 The number of Warrant Shares for which this Warrant may be exercised shall be subject to adjustment as follows:

(a) In the event there is a subdivision or combination of the outstanding shares of Common Stock into a larger or smaller number of shares, the number of Warrant Shares shall be increased or reduced in the same proportion as the increase or decrease in the outstanding shares of Common Stock.

(b) If the Company declares a dividend on Common Stock payable in Common Stock or securities convertible into Common Stock, the number of Warrant Shares shall be increased, as of the record date for determining which holders of Common Stock shall be entitled to receive such dividend, in proportion to the increase in the number of outstanding shares of Common Stock as a result of such dividend.

4.2 In the event at any time prior to the expiration of this Warrant of any reorganization or reclassification of the outstanding shares of Common Stock (other than a change in par value, or from no par value to par value, or from par value to no par value, or as a result of a subdivision or combination) or any consolidation or merger of the Company with another entity, or sale, lease or transfer of all or substantially all of the property or assets of the Company, the Holder shall have the right, but not the obligation, to exercise this Warrant. Upon such exercise, the Holder shall have the right to receive the same kind and number of shares of capital stock and other securities, cash or other property as would have been distributed to the Holder upon such reorganization, reclassification, consolidation or merger had the Holder exercised this Warrant immediately prior to such reorganization, reclassification, consolidation or merger. The Holder shall pay upon such exercise the Exercise Price that otherwise would have been payable pursuant to the terms of this Warrant. If any such reorganization, reclassification, consolidation or merger results in a cash distribution in excess of the Exercise Price provided by this Warrant, the Holder may, at the Holder's option, exercise this Warrant without making payment of the Exercise Price, and in such case the Company shall, upon distribution to the Holder, consider the Exercise Price to have been paid in full, and in making settlement to the Holder, shall deduct an amount equal to the Exercise Price from the amount payable to the Holder.

4.3 If the Company shall, at any time prior to the expiration of this Warrant, dissolve, liquidate or wind up its

affairs, the Holder shall have the right, but not the obligation, to exercise this Warrant. Upon such exercise the Holder shall have the right to receive, in lieu of the shares of Common Stock that the Holder otherwise would have been entitled to receive, the same kind and amount of assets as would have been issued, distributed or paid to the Holder upon any such dissolution, liquidation or winding up with respect to such shares of Common Stock had the Holder been the holder of record of such shares of Common Stock receivable upon exercise of this Warrant on the date for determining those entitled to receive any such distribution. If any such dissolution, liquidation or winding up results in any cash distribution in excess of the Exercise Price provided for by this Warrant, the Holder may, at the Holder's option, exercise this Warrant without making payment of the Exercise Price and, in such case, the Company shall, upon distribution to the Holder, consider the Exercise Price to have been paid in full, and in making settlement to the Holder shall deduct an amount equal to the Exercise Price from the amount payable to the Holder.

4.4 The Company may retain a firm of independent public accountants of recognized standing (who may be any such firm regularly employed by the Company) to make any computation required under this Section 4, and a certificate signed by such firm shall be conclusive evidence of the correctness of any computation made under this Section.

4.5 Whenever the number of shares of Common Stock purchasable upon the exercise of this Warrant is adjusted as herein provided, the Exercise Price shall be adjusted by multiplying the applicable Exercise Price immediately prior to such adjustment by a fraction, the numerator of which shall be the number of shares of Common Stock purchasable upon exercise of this Warrant immediately prior to such adjustment and the denominator of which shall be the number of shares of Common Stock purchasable immediately after such adjustment.

4.6 If the Company does not earn net income, determined in accordance with GAAP, for the fiscal quarter ended December 31, 1996, the Exercise Price automatically shall be reduced from \$7.00 to \$5.00 per share. Determination of whether the Company has earned net income for such fiscal quarter shall be based on the financial statements for such quarter prepared by the Company in accordance with GAAP and utilized in the preparation of the audited financial statements for the fiscal year ended December 31, 1996, as certified by the Chief Financial Officer of the Company as accurate and complete in all material respects. If the Exercise Price is reduced pursuant to the previous sentence and the Company does not report on its Annual Report on Form 10-K for the fiscal year ended December 31, 1997, net income, determined in accordance with GAAP, for such fiscal year, the Exercise Price automatically shall be reduced from \$5.00 to \$3.00 per share.

4.7 Upon any adjustment of the Exercise Price, then and in each such case the Company shall give written notice

thereof, by first class mail, postage prepaid, addressed to the Holder at the address of such Holder as shown on the books of the Company, which notice shall state the Exercise Price resulting from such adjustment, setting forth in reasonable detail the method of calculation and the facts upon which such calculation is based.

4.8 The Company will at all times reserve and keep available out of its authorized Common Stock or its treasury shares, solely for the purpose of issuance upon the exercise of this Warrant as herein provided, such number of shares of Common Stock as shall then be issuable upon the exercise of this Warrant.

4.9 The issuance of certificates for shares of Common Stock upon exercise of this Warrant shall be made without charge to the Holder thereof for any issuance tax in respect thereof; provided, that the Company shall not be required to pay any tax which may be payable in respect of any transfer involved in the issuance and delivery of any certificate in a name other than that of the Holder.

5. Rights of Holder.

Except as otherwise provided in Section 1.1 above, this Warrant does not entitle the Holder to any rights of a stockholder of the Company either at law or in equity, and the rights of any such Holder are limited to those expressed in this Warrant and are not enforceable against the Company, except to the extent set forth herein.

6. Warrant Transfer Agent.

Any reference in this Warrant to the warrant transfer agent will apply if, and only if, the Company will have advised the Holder that such an agent has been designated as an agency for the transfer or exercise of this Warrant.

7. Governing Law.

This Warrant shall be construed in accordance with the laws of the State of California.

8. Notices.

Any notice required hereunder shall be by writing and shall be given by personal delivery, or United States mail, certified or registered with return receipt requested, postage prepaid and shall be deemed to be effective five (5) business days after mailing or on the date of delivery if delivered personally, at the following addresses, or such other addresses as one party may from time to time give the other in writing:

To the Company:           Advanced Polymer Systems, Inc.  
                                  3696 Haven Avenue  
                                  Redwood City, CA 94063

To Holder:                 At the address set forth on  
                                  Schedule A of the Agreement.

9.       Registration Rights.

The Warrant Shares shall be subject to and enjoy the benefits of the provisions regarding registration under the Act set forth in Section 9 of the Agreement.

IN WITNESS WHEREOF, the Company has executed this Warrant as of the 30th day of November, 1995.

ADVANCED POLYMER SYSTEMS, INC.

By: /s/ MICHAEL P. J. O'CONNELL

-----  
Michael P. J. O'Connell  
Chief Financial Officer

Initial Holder

Name:        1--

Address:     3--

PURCHASE FORM

Dated: \_\_\_\_\_, 199\_

The undersigned hereby irrevocably elects to exercise the within Warrant to the extent of purchasing \_\_\_\_\_ shares of Common Stock and hereby makes payment of \$\_\_\_\_\_ in payment of the actual exercise price thereof.

INSTRUCTIONS FOR REGISTRATION OF STOCK

Name: \_\_\_\_\_  
(Please typewrite or print in block letters)

Address: \_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

Signature: \_\_\_\_\_

## ASSIGNMENT FORM

FOR VALUE RECEIVED, \_\_\_\_\_ hereby sells, assigns  
and transfers unto

Name: \_\_\_\_\_  
(Please typewrite or print in block letters)

Address: \_\_\_\_\_  
the right to purchase Common Stock represented by this Warrant to the extent of  
\_\_\_\_\_ shares of Stock and does hereby irrevocably constitute and appoint  
\_\_\_\_\_, attorney, to transfer the same on the books of the  
Company with full power of substitution in the premises.

Signature: \_\_\_\_\_

Dated: \_\_\_\_\_, 199\_

## CONSENT OF KPMG PEAT MARWICK LLP

The Board of Directors  
Advanced Polymer Systems, Inc.

We consent to the use of our report incorporated herein by reference and to the reference to our firm under the heading "Experts" in the prospectus. Our report refers to a change in the method of accounting for certain investments in debt and equity securities.

KPMG PEAT MARWICK LLP

San Francisco, California  
February 6, 1996