\$800

Common Stock, no par value...... \$2,877,702

(1) Estimated solely for purposes of calculating the registration fee pursuant to Rule 457.

EXPLANATORY NOTE

This registration statement is being filed with respect to the registration of additional shares of common stock, no par value, of EMCORE Corporation, a company organized under the laws of New Jersey (the "Company"), pursuant to Rule 462(b) under the Securities Act of 1933, as amended ("Rule 462(b)"). Pursuant to Rule 462(b), the contents of the registration statement of the Company (File No. 333-71791) as amended, which was declared effective on June 10, 1999 (the "Earlier Registration Statement"), including the exhibits thereto, are incorporated by reference into this registration statement. The form of prospectus contained in such Earlier Registration Statement will reflect the aggregate amount of securities registered in this Registration Statement and the Earlier Registration Statement.

The Company certifies that it has wired to the Commission the requisite amount of the registration fee set forth on the cover page of this Registration Statement.

PART II

INFORMATION NOT REQUIRED IN PROSPECTUS

ITEM 16. EXHIBITS

EXHIBIT NO.

All exhibits filed with or incorporated by reference in Registration Statement No. 333-71791 are incorporated by reference into, and shall be deemed part of, this registration statement, except the following which are filed herewith:

DESCRIPTION

| 5.1 | Form of White & Case LLP Opinion |
|------|---|
| 23.1 | Consent of Deloitte & Touche LLP |
| 23.2 | Consent of PricewaterhouseCoopers LLP |
| 23.3 | Consent of Arthur Andersen LLP |
| 23.4 | Consent of White & Case (included in Exhibit 5.1) |

23.5 -- Consent of Lerner David Littenberg Krumholz & Mentlik

SIGNATURES

Pursuant to the requirements of the Securities Act, the Registrant has duly caused this Registration Statement to be signed on its behalf by the undersigned, thereunto duly authorized, in the Township of Somerset, State of New Jersey, on June 11, 1999.

| EMCORE | CORPORATION |
|--------|-------------|

| Ву | * |
|----|---------------------------------------|
| | Reuben F. Richards, Jr. |
| | President and Chief Executive Officer |

Pursuant to the requirements of the Securities Act, this Registration Statement on Form S-3 has been signed by the following persons in the capacities indicated, on June 11, 1999.

| SIGNATURE | TITLE | |
|---------------------------------------|--|--|
| * | Chairman of the Board and Director | |
| Thomas J. Russell | | |
| * | President, Chief Executive Officer and | |
| Reuben F. Richards, Jr. | Director (Principal Executive Officer) | |
| /s/ THOMAS G. WERTHAN | Vice President, Chief Financial | |
| Thomas G. Werthan | Principal Accounting and Pirector (Principal Accounting and Financial Officer) | |
| * | Director | |
| Richard A. Stall | | |
| * | Director | |
| Charles Scott | | |
| * | Director | |
| Robert Louis-Dreyfus | | |
| * | Director | |
| Hugh H. Fenwick | | |
| * | Director | |
| Shigeo Takayama | | |
| /s/ JOHN J. HOGAN, JR. | | |
| John J. Hogan, Jr. | | |
| *By: /s/ THOMAS G. WERTHAN | | |
| Thomas G. Werthan Attorney-in-Fact | · · | |

WHITE & CASE LLP OPINION

June 11, 1999

Emcore Corporation Company 394 Elizabeth Avenue Somerset, New Jersey 08873

Re: EMCORE Corporation

Public offering of shares of Common Stock

Ladies and Gentlemen:

On the date hereof EMCORE Corporation, a New Jersey corporation (the "Company"), filed with the Securities and Exchange Commission under the Securities Act of 1933, as amended (No. 333-) a Registration Statement on Form S-3 (the "Registration Statement").

We have acted as counsel to the Company in connection with the preparation of the Registration Statement. We are familiar with the proceedings of the Board of Directors of the Company in connection with the authorization, issuance and sale of the Shares. We have examined such certificates of public officials and certificates of officers of the Company and the selling shareholders, and the originals (or copies thereof, certified to our satisfaction) of such corporate documents and records of the Company, and such other documents, records and papers as we have deemed relevant in order to give the opinions hereinafter set forth. In this connection, we have assumed the genuineness of signatures, the authenticity of all documents submitted to us as

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originals and the conformity to authentic original documents of all documents submitted to us as certified, conformed, facsimile or photostatic copies. In addition, we have relied, to the extent that we deem such reliance proper, upon such certificates of public officials and of officers of the Company with respect to the accuracy of material factual matters contained therein which were not independently established.

We do not express or purport to express any opinions with respect to laws other than the Federal laws of the United States. As to all matters governed by the laws of the State of New Jersey involved in our opinions set forth below, we have relied, with your consent, upon an opinion of Dillon Bitar & Luther dated today and addressed to us.

Based upon the foregoing, we are of the opinion that the Shares have been duly authorized and, when issued and delivered by the Company against payment therefor as provided by the Underwriting Agreement will be validly issued, fully paid and non-assessable, and may be issued free of restrictive legends.

We hereby consent to the filing of this opinon as an exhibit to the Registration Statement and to the use of our name under the caption "Legal Matters" in the Prospectus forming a part of the Registration Statement.

Very truly yours,

White & Case LLP

Exhibit 23.1

INDEPENDENT AUDITORS' CONSENT

We consent to the incorporation by reference in this Registration Statement of EMCORE Corporation on Form S-3 of our report dated May 14, 1999 (which expresses an unqualified opinion and includes an explanatory paragraph relating to a restatement described in Note 20), included in the Annual Report on Form 10-K/A of EMCORE Corporation for the year ended September 30, 1998, and to the use of our report dated May 14, 1999, appearing in the Prospectus, which is part of this Registration Statement. We also consent to the reference to us under the heading "Experts" in such Prospectus.

/s/ DELOITTE & TOUCHE LLP

Parsippany, New Jersey June 10, 1999

CONSENT OF INDEPENDENT ACCOUNTANTS

We consent to the inclusion and incorporation in this registration statement on Form S-3 of our report dated November 3, 1997, except for Note 15, as to which the date is December 5, 1997, on our audits of the financial statements and financial statement schedule of EMCORE Corporation as of September 30, 1997, and for the two years ended September 30, 1997. We also consent to the references to our firm under the caption "Experts".

/s/ PricewaterhouseCoopers LLP

PricewaterhouseCoopers LLP

Florham Park, New Jersey June 10, 1999

CONSENT OF ARTHUR ANDERSEN LLP

As independent public accountants, we hereby consent to the use of our report dated March 21, 1997 on the financial statements of MicroOptical Devices, Inc. for the year ended December 31, 1996 and for the period from inception (August 3, 1995) through December 31, 1995 and 1996, included in or made a part of this registration statement under Form S-3 for EMCORE Corporation.

Albuquerque, New Mexico June 10, 1999

Exhibit 23.5

Consent of Lerner, David, Littenberg, Krumholz & Mentlik, LLP

We hereby consent to the reference to our firm under the caption "Experts" in the Registration Statement on Form S-3 of EMCORE Corporation for the offering of shares of common stock by EMCORE Corporation and certain selling shareholders.

/s/ Lerner, David, Littenberg, Krumholz & Mentlik, LLP Lerner, David, Littenberg, Krumholz & Mentlik, LLP

June 11, 1999 Westfield, New Jersey