

UNITED STATES
SECURITIES AND EXCHANGE COMMISSION
Washington, D.C. 20549

FORM 10-K/A
(Amendment No. 1)

ANNUAL REPORT PURSUANT TO SECTION 13 OR 15(d) OF THE SECURITIES EXCHANGE ACT OF 1934
For the fiscal year ended September 30, 2012

or

TRANSITION REPORT PURSUANT TO SECTION 13 OR 15(d) OF THE SECURITIES EXCHANGE ACT OF 1934
For the transition period from ___ to ___

Commission File Number 0-22175



EMCORE Corporation

(Exact name of registrant as specified in its charter)

New Jersey

(State or other jurisdiction of incorporation or organization)

22-2746503

(I.R.S. Employer Identification No.)

10420 Research Road, SE, Albuquerque, New Mexico, 87123

(Address of principal executive offices) (Zip Code)

Registrant's telephone number, including area code: **(505) 332-5000**

Securities registered pursuant to Section 12(b) of the Act:

Common Stock, no par value

(Title of each class)

NASDAQ Stock Market

(Name of each exchange on which registered)

Securities registered pursuant to Section 12(g) of the Act: **None**

Indicate by check mark if the registrant is a well-known seasoned issuer, as defined in Rule 405 of the Securities Act. Yes No

Indicate by check mark if the registrant is not required to file reports pursuant to Section 13 or 15(d) of the Act. Yes No

Indicate by check mark whether the registrant (1) has filed all reports required to be filed by Section 13 or 15(d) of the Securities Exchange Act of 1934 during the preceding 12 months (or for such shorter period that the registrant was required to file such reports), and (2) has been subject to such filing requirements for the past 90 days. Yes No

Indicate by check mark whether the registrant has submitted electronically and posted on its corporate website, if any, every Interactive Data File required to be submitted and posted pursuant to Rule 405 of Regulation S-T during the preceding 12 months (or for such shorter period that the registrant was required to submit and post such files). Yes No

Indicate by check mark if disclosure of delinquent filers pursuant to Item 405 of Regulation S-K is not contained herein, and will not be contained, to the best of the registrant's knowledge, in definitive proxy or information statements incorporated by reference in Part III of this Form 10-K or any amendment to this Form 10-K.

Indicate by check mark whether the registrant is a large accelerated filer, an accelerated filer, a non-accelerated filer, or a smaller reporting company. See the definition of "large accelerated filer", "accelerated filer", and "smaller reporting company" in Rule 12b-2 of the Exchange Act. Large accelerated filer Accelerated filer Non-accelerated filer Smaller reporting company

Indicate by check mark whether the registrant is a shell company (as defined in Rule 12b-2 of the Act). Yes No

The aggregate market value of our common stock held by non-affiliates as of March 30, 2012 (the last business day of our most recently completed second fiscal quarter) was approximately \$104.6 million, based on the closing sale price of \$4.77 per share of common stock as reported on the NASDAQ Global Market. For purposes of this disclosure, shares of common stock held by officers and directors and by each person known by us to own 5% or more of our outstanding common stock have been excluded.

As of December 7, 2012, the number of shares outstanding of our no par value common stock totaled 26,378,745.

EXPLANATORY NOTE

This Amendment No. 1 on Form 10-K/A (this “Amendment”) amends our Annual Report on Form 10-K for the fiscal year ended September 30, 2012, that was filed with the Securities and Exchange Commission (“SEC”) on December 13, 2012 (the “Original Filing”). We are filing this Amendment solely for the purpose of amending and restating Exhibit 23.1 of the Original Filing to remove the reference to registration No. 333-175776 on Form S-1 of EMCORE Corporation and to correct a typographical error contained in such exhibit changing the date from “December 10, 2012” to “December 13, 2012.”

Except as described above, no other changes are made to the Original Filing. Unless expressly stated, this Amendment does not reflect events occurring after the filing of the Original Filing, nor does it modify or update in any way the disclosures contained in the Original Filing. Throughout this report, references to “EMCORE”, the “Company”, “we”, “our”, or “us” refer to EMCORE Corporation and its consolidated subsidiaries, taken as a whole, unless the context otherwise indicates.

SIGNATURES

Pursuant to the requirements of the Securities Exchange Act of 1934, the registrant has duly caused this report to be signed on its behalf by the undersigned thereunto duly authorized.

EMCORE CORPORATION

Date: **February 26, 2013**

By: **/s/ Hong Hou**
Hong Q. Hou, Ph.D.
Chief Executive Officer
(Principal Executive Officer)

Date: **February 26, 2013**

By: **/s/ Mark Weinswig**
Mark Weinswig
Chief Financial Officer
(Principal Financial and Accounting Officer)

Pursuant to the requirements of the Securities Exchange Act of 1934, this report has been signed below by the following persons on behalf of the Registrant in the capacities indicated, on February 26, 2013.

Signature	Title
<u>/s/ Hong Q. Hou, Ph.D.</u> Hong Q. Hou, Ph.D.	Chief Executive Officer and Director (Principal Executive Officer)
<u>/s/ Mark B. Weinswig</u> Mark B. Weinswig	Chief Financial Officer (Principal Financial and Accounting Officer)
<u>/s/ *</u> Thomas J. Russell, Ph.D.	Chairman Emeritus
<u>/s/ *</u> Reuben F. Richards, Jr.	Chairman of the Board
<u>/s/ *</u> Robert L. Bogomolny	Director
<u>/s/ *</u> John Gillen	Director
<u>/s/ *</u> Sherman McCorkle	Lead Independent Director
<u>/s/ *</u> Charles T. Scott	Director
<u>/s/ *</u> James A. Tegnalia, Ph.D.	Director

*** /s/ Hong Q. Hou, Ph.D.**
Hong Q. Hou, Ph.D.
Attorney-in-Fact

EXHIBIT INDEX

23.1*	Consent of KPMG LLP.
31.1*	Certificate of Chief Executive Officer Pursuant to Section 302 of the Sarbanes-Oxley Act of 2002
31.2*	Certificate of Chief Financial Officer Pursuant to Section 302 of the Sarbanes-Oxley Act of 2002

* *Filed herewith*

Consent of Independent Registered Public Accounting Firm

The Board of Directors
EMCORE Corporation:

We consent to the incorporation by reference in the registration statement Nos. 333-160368, 333-37306, 333-60816, 333-118076, 333-132317, 333-160360, 333-132318, 333-159769, 333-27507, 333-36445, 333-118074, 333-39547, 333-45827, 333-171929, and 333-175777 on Form S-8 of EMCORE Corporation, and registration Nos. 333-160437, 333-183256, and 333-176797 on Form S-3 of EMCORE Corporation of our report dated December 13, 2012, with respect to the consolidated balance sheets of EMCORE Corporation as of September 30, 2012 and 2011, and the related consolidated statements of operations and comprehensive loss, shareholders' equity and cash flows, for each of the years in the three-year period ended September 30, 2012, and the effectiveness of internal control over financial reporting as of September 30, 2012, which reports appear in the September 30, 2012 annual report on Form 10-K of EMCORE Corporation.

/s/KPMG LLP

Albuquerque, New Mexico
December 13, 2012

**EMCORE CORPORATION
CERTIFICATION PURSUANT TO SECTION 302
OF THE SARBANES-OXLEY ACT OF 2002**

I, Hong Q. Hou, certify that:

1. I have reviewed this Annual Report on Form 10-K/A of EMCORE Corporation ("Report"); and
2. Based on my knowledge, this Report does not contain any untrue statement of a material fact or omit to state a material fact necessary to make the statements made, in light of the circumstances under which such statements were made, not misleading with respect to the period covered by this Report.

Date: **February 26, 2013**

By: **/s/ Hong Hou**
Hong Q. Hou, Ph.D.
Chief Executive Officer
(Principal Executive Officer)

**EMCORE CORPORATION
CERTIFICATION PURSUANT TO SECTION 302
OF THE SARBANES-OXLEY ACT OF 2002**

I, Mark Weinswig, certify that:

1. I have reviewed this Annual Report on Form 10-K/A of EMCORE Corporation ("Report"); and
2. Based on my knowledge, this Report does not contain any untrue statement of a material fact or omit to state a material fact necessary to make the statements made, in light of the circumstances under which such statements were made, not misleading with respect to the period covered by this Report.

Date: **February 26, 2013**

By: **/s/ Mark Weinswig**

Mark Weinswig

Chief Financial Officer

(Principal Financial and Accounting Officer)