

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

**SCHEDULE 14A**

**Proxy Statement Pursuant to Section 14(a) of the  
Securities Exchange Act of 1934**

Filed by the Registrant   
Filed by a Party other than the Registrant

Check the appropriate box:

- Preliminary Proxy Statement
- Confidential, For Use of the Commission Only (as permitted by Rule 14a-6(e)(2))
- Definitive Proxy Statement
- Definitive Additional Materials
- Soliciting Material Pursuant to §240.14a-12

**ENZON PHARMACEUTICALS, INC.**

(Name of Registrant as Specified in its Charter)

**N/A**

(Name of Person(s) Filing Proxy Statement, if Other Than the Registrant)

Payment of Filing Fee (Check the appropriate box):

- No fee required.
- Fee computed on table below per Exchange Act Rules 14a-6(l)(4) and 0-11.

(1) Title of each class of securities to which transaction applies:

---

(2) Aggregate number of securities to which transaction applies:

---

(3) Per unit price or other underlying value of transaction computed pursuant to Exchange Act Rule 0-11: Set forth the amount on which the filing fee is calculated and state how it was determined.

---

(4) Proposed maximum aggregate value of transaction:

---

(5) Total fee paid.

---

- Check box if any part of the fee is offset as provided by Exchange Act rule 0-11(a)(2) and identify the filing for which the offsetting fee was paid previously. Identify the previous filing by registration statement number, or the Form or Schedule and the date of its filing.

(1) Amount Previously Paid:

---

(2) Form, Schedule or Registration Statement No.:

---

(3) Filing Party:

---

(4) Date Filed:

---

---

**Enzon Pharmaceuticals, Inc.**

20 Kingsbridge Road  
Piscataway, NJ 08854

**NOTICE OF ANNUAL MEETING  
OF STOCKHOLDERS**

to be held on  
Wednesday, May 16, 2012

Dear Stockholder,

The 2012 Annual Meeting of Stockholders of Enzon Pharmaceuticals, Inc., will be held at the Hilton Hotel, 1335 Avenue of the Americas, New York, NY 10019, on May 16, 2012, at 11:00 a.m., (Eastern Daylight Time).

Proposals to be considered at the Annual Meeting:

- (1) To elect seven (7) members to the Board of Directors, each to serve for a one-year term:
- (2) To ratify the appointment of KPMG LLP as the Company's independent registered public accounting firm for the fiscal year ending December 31, 2012
- (3) To approve, on an advisory basis, the compensation of the Company's named executive officers
- (4) To address such other matters as may properly come before the 2012 annual meeting or any adjournment or postponement thereof.

Management recommends a vote "FOR" all nominees under Proposal 1, and "FOR" Proposals 2 and 3.

\* Stockholders are cordially invited to attend the Annual Meeting and vote in person.

**You May Vote Your Proxy When You View The Material On The Internet. You Will Be Asked To Follow The Prompts To Vote Your Shares.**

Your electronic vote authorizes the named proxies to vote your shares in the same manner as if you marked, signed, dated and returned the proxy card.



**Vote Your Proxy on the Internet:**

Go to [www.cstproxyvote.com](http://www.cstproxyvote.com)  
Have your notice available when you access the above website. Follow the prompts to vote your shares.

**COMPANY ID:**

**PROXY NUMBER:**

**ACCOUNT NUMBER:**

**The Proxy Materials are available for review at:**

<http://www.cstproxy.com/enzon/2012>

---

**Enzon Pharmaceuticals, Inc.**

20 Kingsbridge Road  
Piscataway, NJ 08854

**Important Notice Regarding the Availability Of Proxy Materials For the 2012 Annual Meeting of Stockholders to Be Held On Wednesday, May 16, 2012**

This communication presents only an overview of the more complete proxy materials that are available to you on the Internet. We encourage you to access and review all of the important information contained in the proxy materials before voting.

If you would like to receive a paper or e-mail copy of these documents, **you must request one**. There is no charge for such documents to be mailed to you. Please make your request for a copy as instructed below on or before May 7, 2012 to facilitate a timely delivery. You may also request that you receive paper copies of all future proxy materials from the Company.

The following Proxy Materials are available to you to review at: <http://www.cstproxy.com/enzon/2012>

- the Company's Annual Report for the year ended December 31, 2011.
- the Company's 2012 Proxy Statement (including all attachments thereto).
- the Proxy Card.
- any amendments to the foregoing materials that are required to be furnished to stockholders.

You may also request directions to the meeting by calling the Company's Investor Relations department at (203) 794-1100.

**ACCESSING YOUR PROXY MATERIALS ONLINE**

**Have this notice available when you request a paper copy of the proxy materials or to vote your proxy electronically. You must reference your company ID, 9-digit proxy number and 10-digit account number.**

**REQUESTING A PAPER COPY OF THE PROXY MATERIALS**

**By telephone please call 1-888-221-0690,**

**or**

**By logging on to <http://www.cstproxy.com/enzon/2012>**

**or**

**By email at: [proxy@continentalstock.com](mailto:proxy@continentalstock.com)**

*Please include the company name and your account number in the subject line.*

---