
SECURITIES AND EXCHANGE COMMISSION
Washington, D.C. 20549

SCHEDULE 13D

Under the Securities Exchange Act of 1934

(Amendment No. 5)*

ENZO BIOCHEM INC

(Name of Issuer)

Common Stock, par value \$0.01 per share

(Title of Class of Securities)

294100102

(CUSIP Number)

BRADLEY L. RADOFF
2727 Kirby Drive, Unit 29L
Houston, TX, 77098
713-482-2196

RYAN NEBEL
OLSHAN FROME WOLOSKY LLP, 1325 Avenue of the Americas
New York, NY, 10019
212-451-2300

(Name, Address and Telephone Number of Person Authorized to Receive Notices and Communications)

06/23/2025

(Date of Event Which Requires Filing of This Statement)

If the filing person has previously filed a statement on Schedule 13G to report the acquisition that is the subject of this Schedule 13D, and is filing this schedule because of §§ 240.13d-1(e), 240.13d-1(f) or 240.13d-1(g), check the following box. ☐

The information required on the remainder of this cover page shall not be deemed to be "filed" for the purpose of Section 18 of the Securities Exchange Act of 1934 ("Act") or otherwise subject to the liabilities of that section of the Act but shall be subject to all other provisions of the Act (however, see the Notes).

SCHEDULE 13D

CUSIP No.	294100102
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1	Name of reporting person Radoff Family Foundation
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2	Check the appropriate box if a member of a Group (See Instructions)	
	<input type="checkbox"/> (a) <input type="checkbox"/> (b)	
3	SEC use only	
4	Source of funds (See Instructions) WC	
5	Check if disclosure of legal proceedings is required pursuant to Items 2(d) or 2(e) <input type="checkbox"/>	
6	Citizenship or place of organization TEXAS	
Number of Shares Beneficially Owned by Each Reporting Person With:	7	Sole Voting Power 0.00
	8	Shared Voting Power 430,000.00
	9	Sole Dispositive Power 0.00
	10	Shared Dispositive Power 430,000.00
11	Aggregate amount beneficially owned by each reporting person 430,000.00	
12	Check if the aggregate amount in Row (11) excludes certain shares (See Instructions) <input type="checkbox"/>	
13	Percent of class represented by amount in Row (11) 0.8 %	
14	Type of Reporting Person (See Instructions) CO	

SCHEDULE 13D

CUSIP No.	294100102
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1	Name of reporting person Radoff Bradley Louis
2	Check the appropriate box if a member of a Group (See Instructions) <input type="checkbox"/> (a) <input type="checkbox"/> (b)
3	SEC use only
4	Source of funds (See Instructions) AF, PF, OO
5	Check if disclosure of legal proceedings is required pursuant to Items 2(d) or 2(e) <input type="checkbox"/>

6	Citizenship or place of organization UNITED STATES	
Number of Shares Beneficially Owned by Each Reporting Person With:	7	Sole Voting Power 4,390,882.00
	8	Shared Voting Power 430,000.00
	9	Sole Dispositive Power 4,390,882.00
	10	Shared Dispositive Power 430,000.00
11	Aggregate amount beneficially owned by each reporting person 4,820,882.00	
12	Check if the aggregate amount in Row (11) excludes certain shares (See Instructions) <input type="checkbox"/>	
13	Percent of class represented by amount in Row (11) 9.2 %	
14	Type of Reporting Person (See Instructions) IN	

SCHEDULE 13D

Item 1. Security and Issuer

(a) Title of Class of Securities:

Common Stock, par value \$0.01 per share

(b) Name of Issuer:

ENZO BIOCHEM INC

(c) Address of Issuer's Principal Executive Offices:

60 EXECUTIVE BLVD, FARMINGDALE, NEW YORK , 11735.

Item 3. Source and Amount of Funds or Other Consideration

Item 3 is hereby amended and restated to read as follows:

The Shares purchased by the Radoff Foundation were purchased with working capital (which may, at any given time, include margin loans made by brokerage firms in the ordinary course of business). The aggregate purchase price of the 430,000 Shares directly owned by the Radoff Foundation is approximately \$1,427,845, including brokerage commissions.

4,155,600 of the Shares directly owned by Mr. Radoff were purchased with personal funds (which may, at any given time, include margin loans made by brokerage firms in the ordinary course of business). The aggregate purchase price of such Shares purchased by Mr. Radoff is approximately \$13,026,662, including brokerage commissions. In his capacity as a director of the Issuer, Mr. Radoff has also been awarded 378,179 restricted stock units ("RSUs"), 235,282 of which have vested as of the date hereof. The remainder of Mr. Radoff's RSUs vest as described in Item 6 hereof.

Item 4. Purpose of Transaction

Item 4 is hereby amended to add the following:

On June 23, 2025, the Issuer entered into an Agreement and Plan of Merger (the "Merger Agreement") with Bethpage Parent, Inc., a Delaware corporation ("Parent"), and Bethpage Merger Sub, Inc., a New York corporation and a wholly owned subsidiary of Parent ("Merger Sub"). Pursuant to and subject to the terms of the Merger Agreement, Merger Sub will merge with and into the Issuer, with the Issuer continuing as the surviving corporation of the merger (the "Merger") and a wholly owned subsidiary of Parent, as more fully described in the Form 8-K filed by the Issuer with the Securities and Exchange Commission on June 24, 2025.

Concurrently with the execution of the Merger Agreement, Mr. Radoff, solely in his capacity as a shareholder of the Issuer, and certain other parties entered into separate voting and support agreements (each, a "Voting and Support Agreement") in favor of Parent and Merger Sub. Under the terms of the Voting and Support Agreement, Mr. Radoff has agreed to vote all of his Shares in favor of the

Merger and the adoption of the Merger Agreement and against any alternative transaction proposal. In addition, Mr. Radoff has agreed not to take certain actions, including (i) transferring any Shares (subject to certain exceptions), (ii) granting any proxies or powers of attorney or (iii) exercising any dissenters' rights with respect to the Merger. The Voting and Support Agreement terminates in certain circumstances, including, among others, upon the valid termination of the Merger Agreement in accordance with its terms (subject to certain limited exceptions) and by written agreement of Parent and each securityholder party thereto.

The foregoing description of the Voting and Support Agreement is not complete and is qualified in its entirety by reference to the full text of the form of Voting and Support Agreement, which is attached hereto as Exhibit 99.1.

Item 5. Interest in Securities of the Issuer

(a) Item 5(a) is hereby amended and restated to read as follows:

The aggregate percentage of Shares reported owned by each person named herein is based upon 52,432,129 Shares outstanding as of June 19, 2025, which is the total number of Shares outstanding as reported in the Merger Agreement attached as Exhibit 2.1 to the Issuer's Current Report on Form 8-K filed with the Securities and Exchange Commission on June 24, 2025.

As of the date hereof, the Radoff Foundation directly beneficially owned 430,000 Shares, constituting approximately 0.8% of the Shares outstanding.

As of the date hereof, Mr. Radoff directly beneficially owned 4,390,882 Shares, constituting approximately 8.4% of the Shares outstanding. Mr. Radoff, as a director of the Radoff Foundation, may be deemed the beneficial owner of the 430,000 Shares owned by the Radoff Foundation, which together with the 4,390,882 Shares he directly owns, constitutes an aggregate of 4,820,882 Shares beneficially owned by Mr. Radoff, constituting approximately 9.2% of the Shares outstanding.

The filing of this Schedule 13D shall not be deemed an admission that the Reporting Persons are, for purposes of Section 13(d) of the Exchange Act, the beneficial owners of any securities of the Issuer that he or it does not directly own. Each Reporting Person disclaims beneficial ownership of the Shares that he or it does not directly own.

(b) Item 5(b) is hereby amended and restated to read as follows:

Each of the Radoff Foundation and Mr. Radoff may be deemed to share the power to vote and dispose of the Shares directly beneficially owned by the Radoff Foundation.

Mr. Radoff has the sole power to vote and dispose of the Shares directly beneficially owned by him.

(c) Item 5(c) is hereby amended and restated to read as follows:

There have been no transactions in securities of the Issuer by the Reporting Persons during the past 60 days.

Item 6. Contracts, Arrangements, Understandings or Relationships With Respect to Securities of the Issuer

Item 6 is hereby amended to add the following:

On June 23, 2025, Mr. Radoff, Parent and Merger Sub entered into the Voting and Support Agreement as defined and described in Item 4 above.

Mr. Radoff has been awarded 378,179 RSUs in his capacity as a director of the Issuer, 235,282 of which have vested as of the date hereof. Mr. Radoff's remaining 142,897 RSUs vest upon the earlier of (i) January 16, 2026 or (ii) a change of control event.

Item 7. Material to be Filed as Exhibits.

Item 7 is hereby amended to add the following exhibit:

99.1 - Form of Voting and Support Agreement (incorporated by reference to Ex. 10.2 to the Issuer's Current Report on Form 8-K, filed with the Securities and Exchange Commission on June 24, 2025).

SIGNATURE

After reasonable inquiry and to the best of my knowledge and belief, I certify that the information set forth in this statement is true, complete and correct.

Radoff Family Foundation

Signature: /s/ Bradley L. Radoff
Name/Title: Bradley L. Radoff, Director
Date: 06/25/2025

Radoff Bradley Louis

Signature: /s/ Bradley L. Radoff
Name/Title: Bradley L. Radoff
Date: 06/25/2025