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

FORM S-8 REGISTRATION STATEMENT

Under the Securities Act of 1933

BIO-TECHNE CORPORATION (Exact Name of Registrant as Specified in its Charter)

Minnesota

41-1427402

(State or Other Jurisdiction of Incorporation or Organization)

(I.R.S. Employer Identification Number)

614 McKinley Place N.E. Minneapolis, Minnesota 55413-2610

(Address of Principal Executive Office and Zip Code)

Bio-Techne Corporation Second Amended and Restated 2010 Equity Incentive Plan (Full Title of the Plan)

James Hippel
Senior Vice President of Finance and Chief Financial Officer
Bio-Techne Corporation
614 McKinley Place N.E.
Minneapolis, Minnesota 55413-2610
(612) 379-8854

(Name, Address and Telephone Number, Including Area Code, of Agent for Service)

Copies to:
Melodie R. Rose
Fredrikson & Byron, P.A.
200 South Sixth Street, Suite 4000
Minneapolis, MN 55402
Fax: (612) 492-7162

Indicate by check mark whether company, or an emerging grow company," and "emerging growth	th company. See the	definitions of "la	rge accelerated	-		
Large accelerated filer	X		A	ccelerated	d filer	

Smaller Reporting Company

Emerging Growth Company

If an emerging growth company, indicate by check mark if the registrant has elected not to use the extended transition period for
complying with any new or revised financial accounting standards provided pursuant to Section $7(a)(2)(B)$ of the Exchange Act

Non-accelerated filer

CALCULATION OF REGISTRATION FEE

Title of Securities to be Registered	Amount to be Registered ⁽¹⁾	Proposed Maximum Offering Price Per Share ⁽²⁾	Proposed Maximum Aggregate Offering Price ⁽²⁾	Amount of Registration Fee
Common Stock, par value \$0.01 per share (Reserved for Future Sales)	2,648,000	\$123.12	\$326,021,760	\$40,589

- (1) Pursuant to Rule 416(a) under the Securities Act of 1933, as amended (the "Securities Act"), this Registration Statement shall also cover any additional shares of the Registrant's common stock, par value \$0.01 per share, which may become issuable under the Bio-Techne Corporation Second Amended and Restated 2010 Equity Incentive Plan (the "Second Amended and Restated 2010 EIP") being registered pursuant to this Registration Statement by reason of any stock dividend, stock split, recapitalization or any other similar transaction effected without the receipt of consideration which results in an increase in the number of the registrant's outstanding shares of common stock.
- (2) Estimated pursuant to Rule 457(h) and Rule 457(c) under the Securities Act solely for the purpose of calculating the registration fee and based upon the average of the high and low prices of the Registrant's Common Stock on October 19, 2017, as quoted on the Nasdaq Global Market.

STATEMENT OF INCORPORATION BY REFERENCE

This Registration Statement on Form S-8 is filed by Bio-Techne Corporation (the "Company "or the "Registrant") to register 2,648,000 shares of its common stock, par value \$0.001 per share, for issuance under the Registrant's Second Amended and Restated 2010 EIP, which common stock is in addition to the 3,000,000 shares of common stock registered on the Company's Registration Statement on Form S-8 filed on November 12, 2010 (File No. 333-170576) and the 800,000 shares of common stock registered on the Company's Registration Statement on Form S-8 filed on October 30, 2015 (File No. 333-207710) (collectively, the "Prior Registration Statements"). This Registration Statement relates to securities of the same class as that to which the Prior Registration Statement relates and is submitted in accordance with General Instruction E to Form S-8 regarding Registration of Additional Securities. Pursuant to General Instruction E of Form S-8, the contents of the Prior Registration Statements are incorporated herein by reference and made part of this Registration Statement, except for Item 8, Exhibits.

PART II

INFORMATION REQUIRED IN THE REGISTRATION STATEMENT

Item 8. Exhibits.

- 5.1 Opinion of Fredrikson & Byron, P.A., filed herewith.
- 23.1 Consent of KPMG LLP, Independent Registered Public Accounting Firm, filed herewith.
- 23.2 Consent of Fredrikson & Byron, P.A. (included in Exhibit 5.1), filed herewith.
- 24.1 Power of Attorney (included on signature page hereto).
- 99.1 Bio-Techne Corporation Second Amended and Restated 2010 Equity Incentive Plan, incorporated by reference to Exhibit 10.1 of the Company's Current Report on Form 8-K filed with the Securities and Exchange Commission on October 26, 2017.

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-8 and has duly caused this Registration Statement to be signed on its behalf by the undersigned, thereunto duly authorized, in the City of Minneapolis, State of Minnesota, on October 26, 2017.

BIO-TECHNE CORPORATION

By: /s/ James Hippel

James Hippel
Senior Vice President of Finance and Chief
Financial Officer

Each of the undersigned constitutes and appoints Charles R. Kummeth and James Hippel his true and lawful attorney-in-fact and agent, each acting alone, with full powers of substitution and resubstitution, for him and in his name, place and stead, in any and all capacities, to sign the Form S-8 Registration Statement of Bio-Techne Corporation relating to the Company's Second Amended and Restated 2010 Equity Incentive Plan, any or all amendments or post-effective amendments to the Form S-8 Registration Statement, and any or all future Form S-8 Registration Statements filed for the purpose of registering additional shares resulting from share increases under the Company's Second Amended and Restated 2010 Equity Incentive Plan, and to file the same, with all exhibits thereto, and other documents in connection therewith, with the Securities and Exchange Commission, granting unto said attorneys-in-fact and agents, each acting alone, full power and authority to do and perform each and every act and thing requisite and necessary to be done in and about the premises, as fully to all intents and purposes as the undersigned might or could do in person, hereby ratifying and confirming all that said attorneys-in-fact and agents, each acting alone, or their substitute or substitutes, may lawfully 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 by the following persons in the capacities and on the date listed below.

Signature	Title	Date	
/s/ Charles R. Kummeth Charles R. Kummeth	President, Chief Executive Officer and Director (principal executive officer)	October 26, 2017	
/s/ James Hippel James Hippel	Senior Vice President—Finance and Chief Financial Officer (principal financial and accounting officer)	October 26, 2017	
/s/ Robert V. Baumgartner Robert V. Baumgartner	Director	October 26, 2017	
/s/ Charles A. Dinarello Charles A. Dinarello	Director	October 26, 2017	
/s/ John L. Higgins John L. Higgins	Director	October 26, 2017	
/s/ Karen A. Holbrook Karen A. Holbrook	Director	October 26, 2017	
/s/ Joseph D. Keegan Joseph D. Keegan	Director	October 26, 2017	

/s/ Roeland Nusse Roeland Nusse	Director	October 26, 2017
/s/ Alpna Seth Alpna Seth	Director	October 26, 2017
/s/ Randolph Steer Randolph Steer	Director	October 26, 2017
/s/ Harold J. Wiens Harold J. Wiens	Director	October 26, 2017

EXHIBIT INDEX

Exhibit Number	Exhibit Description
5.1	Opinion of Fredrikson & Byron, P.A., filed herewith.
23.1	Consent of KPMG LLP, Independent Registered Public Accounting Firm, filed herewith.
23.2	Consent of Fredrikson & Byron, P.A. (included in Exhibit 5.1), filed herewith.
24.1	Power of Attorney (included on signature page hereto).
99.1	Bio-Techne Corporation Second Amended and Restated 2010 Equity Incentive Plan, incorporated by reference to Exhibit 10.1 of the Company's Current Report on Form 8-K filed with the Securities and Exchange Commission on October 26, 2017.

OPINION OF FREDRIKSON & BYRON, P.A.

FREDRIKSON & BYRON, P.A.

200 South Sixth Street, Suite 4000 Minneapolis, Minnesota 55402 Telephone: (612) 492-7000 Facsimile: (612) 492-7077

October 26, 2017

Bio-Techne Corporation 614 McKinley Place N.E. Minneapolis, MN 55413

Re: Registration Statement on Form S-8

Ladies and Gentlemen:

We are acting as corporate counsel to Bio-Techne Corporation (the "Company") in connection with the filing by the Company of a Registration Statement on Form S-8 (the "Registration Statement") under the Securities Act of 1933, as amended (the "Act") to register 2,648,000 additional shares (plus any additional shares as described in footnote (1) to the Calculation of Registration Fee table) of Common Stock, par value \$0.01, of the Company, which we have been advised by the Company may be issued from time to time pursuant to the Bio-Techne Corporation Second Amended and Restated 2010 Equity Incentive Plan (the "Plan"). All such shares of Common Stock to be issued pursuant to the Plan are referred to herein as the "Shares."

In acting as such counsel and for the purpose of rendering this opinion, we have reviewed copies of the following, as presented, and represented as being such, to us by the Company: (i) the Company's Amended and Restated Articles of Incorporation, as amended; (ii) the Company's Amended and Restated Bylaws; (iii) certain corporate resolutions adopted by the Board of Directors and shareholders of the Company pertaining to the approval of the Plan; (iv) the Plan; and (v) the Registration Statement. In our examination, we have assumed the genuineness of all signatures, the authenticity of all documents submitted to us as originals and the conformity with the original of all documents submitted to us as copies thereof.

Based on, and subject to, the foregoing and upon representations and information provided by the Company or its officers or directors or by public officials or their staffs, it is our opinion as of this date that, upon issuance and delivery of the Shares against receipt by the Company of the consideration for the Shares pursuant to the terms of the Plan, the Shares will be validly issued, fully paid and nonassessable. This opinion is limited to the laws of the State of Minnesota.

We hereby consent to the filing of this opinion as an exhibit to the Registration Statement. In giving such consent, we do not hereby admit that we are in the category of persons whose consent is required under Section 7 of the Securities Act of 1933, as amended, or the rules and regulations of the Securities and Exchange Commission.

Very truly yours,

Fredrikson & Byron, P.A.

By: /s/ Melodie R. Rose Melodie R. Rose Vice President

Consent of Independent Registered Public Accounting Firm

The Board of Directors Bio-Techne Corporation:

We consent to the use of our reports dated September 7, 2017 with respect to the consolidated balance sheets of Bio-Techne Corporation as of June 30, 2017 and 2016, and the related consolidated statements of earnings and comprehensive income, shareholders' equity, and cash flows for each of the years in the three-year period ended June 30, 2017, and the effectiveness of internal control over financial reporting as of June 30, 2017, incorporated by reference herein.

Our report dated September 7, 2017, on the effectiveness of internal control over financial reporting as of June 30, 2017, expresses our opinion that Bio-Techne Corporation did not maintain effective internal control over financial reporting as of June 30, 2017 because of the effects of material weaknesses on the achievement of the objectives of the control criteria and contains an explanatory paragraph that states that material weaknesses were identified related to the Company not maintaining effective monitoring or information and communication processes and not having effective control activities over the establishment of general information technology controls for certain of its information technology platforms.

Our report dated September 7, 2017, on the effectiveness of internal control over financial reporting as of June 30, 2017, contains an explanatory paragraph that states that the scope of management's assessment of the effectiveness of internal control over financial reporting excluded the operations of Space Import-Export, Srl (Space) and Advanced Cell Diagnostics (ACD), which were acquired on July 1, 2016 and August 1, 2016, respectively. Space and ACD represented 22.9% of Bio-Techne Corporation's total assets and 7.5% of its total revenues as of and for the fiscal year ended June 30, 2017. Our audit of internal control over financial reporting of Bio-Techne Corporation also excluded an evaluation of the internal control over financial reporting of Space and ACD.

/s/ KPMG LLP

Minneapolis, Minnesota October 26, 2017