UNITED STATES SECURITIES AND EXCHANGE COMMISSION

Washington, D.C. 20549

FORM S-8 REGISTRATION STATEMENT

UNDER
THE SECURITIES ACT OF 1933

Silvaco Group, Inc.

(Exact Name of Registrant as Specif	ied in Its Charter)	
Delaware (State or other jurisdiction of incorporation or organization)	27-1503712 (I.R.S. Employer Identification Number)	
Silvaco Group, Inc 4701 Patrick Henry D Building #23 Santa Clara, California, (Address of Principal Executive Off	95054	
Amended and Restated 2014 Stoc 2024 Stock Incentive 2024 Employee Stock Purc (Full title of the plan	Plan hase Plan	
Dr. Babak A. Tahe Chief Executive Offi Silvaco Group, Inc 4701 Patrick Henry D Building #23 Santa Clara, CA 950 (408) 567-1000 (Name, Address, Including Zip Code, and Telephone Number,	cer :- rive 954	
Copies to:		
Gurpreet Bal Drew M. Valentine DLA Piper LLP (US) 3203 Hanover Street, Suite 100 Palo Alto, CA 94304 (650) 833-2000	Eric Jensen Richard Segal Darah Protas Cooley LLP 3175 Hanover Street Palo Alto, CA 94304 (650) 843-5000	
Indicate by check mark whether the registrant is a large accelerated filer, an accelerated filer, company. See the definitions of "large accelerated filer," "accelerated filer," "smaller reporting Act.		
Large accelerated filer □	Accelerated filer	
Non-accelerated filer $\ \square$ (do not check if a small reporting company) Emerging growth company $\ \boxtimes$	Smaller reporting company	Σ
If an emerging growth company, indicate by check mark if the registrant has elected not to financial accounting standards provided pursuant to Section 7(a)(2)(B) of the Exchange Act. \Box	use the extended transition period for complying with any new or rev	ise

PART I

Information Required in the Section 10(a) Prospectus

The information called for by Part I of Form S-8 is omitted from this Registration Statement in accordance with Rule 428 of the Securities Act of 1933 (the "Securities Act") and the instructions to Form S-8. In accordance with the rules and regulations of the Securities and Exchange Commission (the "Commission") and the instructions to Form S-8, such documents are not being filed with the Commission either as part of this Registration Statement or as prospectuses or prospectus supplements pursuant to Rule 424.

PART II

Information Required in the Registration Statement

Item 3. Incorporation of documents by reference

The Registrant hereby incorporates by reference into this Registration Statement the following documents previously filed with the Commission:

- a. Amendment No. 3 to the Registration Statement on Form S-1 filed with the Commission on May 3, 2024 (File No. 333-278666), which contains audited financial statements for the Registrant's latest fiscal year, for which such statements have been filed (the "*Registration Statement*");
- b. the Registrant's prospectus to be filed on or about May 9, 2024 pursuant to Rule 424(b), dated May 8, 2024, under the Securities Act relating to the Registration Statement; and
- the description of the Registrant's common stock, par value \$0.0001 per share (the "Common Stock") which is contained in the Registrant's Registration Statement on Form 8-A (File No. 001-42043), filed with the Commission on May 6, 2024, under Section 12(b) of the Securities Exchange Act of 1934, as amended (the "Exchange Act"), including any amendment or report filed for the purpose of updating such description (the "Description of the Registrant's Common Stock").

All reports and definitive proxy or information statements filed pursuant to Section 13(a), 13(c), 14 or 15(d) of the Exchange Act (other than Current Reports on Form 8-K furnished pursuant to Item 2.02 or Item 7.01 of Form 8-K, including any exhibits included with such information that are related to such items) after the date of this Registration Statement and prior to the filing of a post-effective amendment which indicates that all securities offered hereby have been sold or which de-registers all securities then remaining unsold shall be deemed to be incorporated by reference into this Registration Statement and to be a part hereof from the date of filing of such documents; *provided, however*, that documents or information deemed to have been furnished and not filed in accordance with the rules of the Commission shall not be deemed incorporated by reference into this Registration Statement.

Any statement contained in a document incorporated or deemed to be incorporated by reference herein shall be deemed to be modified or superseded for purposes of this Registration Statement to the extent that a statement herein or in any subsequently filed document which also is or is deemed to be incorporated by reference herein modifies or supersedes such statement. Any such statement so modified or superseded shall not constitute a part of this Registration Statement, except as so modified or superseded.

Item 4. Description of securities

See the Description of the Registrant's Common Stock contained in the Registration Statement.

Item 5. Interests of named experts and counsel

Not Applicable.

Item 6. Indemnification of directors and officers

Section 145 of the Delaware General Corporation Law ("**DGCL**") authorizes a court to award, or a corporation's board of directors to grant, indemnity to directors and officers in terms sufficiently broad to permit such indemnification under certain circumstances for liabilities, including reimbursement for expenses incurred, arising under the Securities Act.

The Registrant's amended and restated certificate of incorporation limits the personal liability of directors for breach of fiduciary duty to the maximum extent permitted by the DGCL and provides that no director will have personal liability to the Registrant or to its stockholders for monetary damages for breach of fiduciary duty or other duty as a director. However, these provisions do not eliminate or limit the liability of any of the Registrant's directors:

- for any breach of the director's duty of loyalty to the Registrant or its stockholders;
- for acts or omissions not in good faith or which involve intentional misconduct or a knowing violation of law;
- for voting or assenting to unlawful payments of dividends, stock repurchases or other distributions; or
- for any transaction from which the director derived an improper personal benefit.

Any amendment to, or repeal of, these provisions will not eliminate or reduce the effect of these provisions in respect of any act, omission or claim that occurred or arose prior to such amendment or repeal. If the DGCL is amended to provide for further limitations on the personal liability of directors of corporations, then the personal liability of the Registrant's directors will be further limited to the greatest extent permitted by the DGCL.

In addition, the Registrant's amended and restated certificate of incorporation provides that it must indemnify its directors and officers and it must advance expenses, including attorneys' fees, to its directors and officers in connection with legal proceedings, subject to very limited exceptions.

The Registrant maintains a general liability insurance policy that covers certain liabilities of its directors and officers arising out of claims based on acts or omissions in their capacities as directors or officers. In addition, the Registrant has entered into, and intends to continue to enter into, indemnification agreements with each of its directors and executive officers. These indemnification agreements require the Registrant to indemnify these individuals to the fullest extent permitted under Delaware law against liabilities that may arise by reason of their service to the Registrant, and to advance expenses incurred as a result of any proceeding against them as to which they could be indemnified.

Item 7. Exemption from registration claimed

Not applicable.

Item 8. Exhibits

Exhibit Number	Exhibit Description
4.1	Amended and Restated Certificate of Incorporation of the Registrant, as currently in effect (incorporated by reference to Exhibit 3.1.3 to the Company's Registration Statement on Form S-1 (File No. 278666) filed on May 3, 2024).
4.2	Form of Amended and Restated Certificate of Incorporation of the Registrant, to be in effect upon the closing of the Registrant's initial public offering (incorporated by reference to Exhibit 3.2 to the Company's Registration Statement on Form S-1 (File No. 278666) filed on
	<u>May 3, 2024).</u>
4.3	Amended and Restated Bylaws of the Registrant, as currently in effect (incorporated by reference to Exhibit 3.3 to the Company's Registration Statement on Form S-1 (File No. 278666) filed on May 3, 2024).
4.4	Form of Amended and Restated Bylaws of the Registrant, to be in effect upon the closing of the Registrant's initial public offering (incorporated by reference to Exhibit 3.4 to the Company's Registration Statement on Form S-1 (File No. 278666) filed on May 3, 2024).
4.5	Form of Common Stock Certificate of the Registrant (incorporated by reference to Exhibit 4.1 to the Company's Registration Statement on Form S-1 (File No. 278666) filed on May 3, 2024).
5.1*	Form of Opinion of DLA Piper LLP (US).
23.1*	Consent of Moss Adams LLP.
23.2*	Consent of DLA Piper LLP (US) (included in Exhibit 5.1).
24.1*	Power of Attorney (included as part of the signature pages to this Registration Statement).
99.1	Silvaco Group, Inc. Amended and Restated 2014 Stock Plan (including forms of award agreements thereunder) (incorporated by reference to Exhibit 10.2 to the Company's Registration Statement on Form S-1 (File No. 278666) filed on May 3, 2024).
99.2	Silvaco Group, Inc. 2024 Stock Incentive Plan (including forms of award agreements thereunder) (incorporated by reference to Exhibit 10.3 to the Company's Registration Statement on Form S-1 (File No. 278666) filed on May 3, 2024).
99.3	Silvaco Group, Inc. 2024 Employee Stock Purchase Plan (incorporated by reference to Exhibit 10.4 to the Company's Registration Statement on Form S-1 (File No. 278666) filed on May 3, 2024).
107*	Filing Fee Table.

Item 9. Undertakings.

- (a) The undersigned Registrant hereby undertakes:
 - (1) To file, during any period in which offers or sales are being made, a post-effective amendment to this Registration Statement:
 - (i) To include any prospectus required by Section 10(a)(3) of the Securities Act;
 - (ii) To reflect in the prospectus any facts or events arising after the effective date of the Registration Statement (or the most recent posteffective amendment thereof) which, individually or in the aggregate, represent a fundamental change in the information set forth in the Registration Statement. Notwithstanding the foregoing, any increase or decrease in volume of securities offered (if the total dollar value of securities offered would not exceed that which was registered) and any deviation from the low or high end of the estimated maximum offering range may be reflected in the form of prospectus filed with the Commission pursuant to Rule 424(b) if, in the aggregate, the changes in volume and price represent no more than a 20% change in the maximum aggregate offering price set forth in the "Calculation of Registration Fee" table in the effective Registration Statement; and

Filed herewith.

(iii) To include any material information with respect to the plan of distribution not previously disclosed in the Registration Statement or any material change to such information in the Registration Statement;

Provided, however, that paragraphs (a)(1)(i) and (a)(1)(ii) do not apply if the information required to be included in a post-effective amendment by those paragraphs is contained in reports filed with or furnished to the Commission by the Registrant pursuant to Section 13 or Section 15(d) of the Exchange Act that are incorporated by reference in the Registration Statement.

- (2) That, for the purpose of determining any liability under the Securities Act, each such post-effective amendment shall be deemed to be a new registration statement relating to the securities offered therein, and the offering of such securities at that time shall be deemed to be the initial bona fide offering thereof.
- (3) To remove from registration by means of a post-effective amendment any of the securities being registered which remain unsold at the termination of the offering.
- (b) The undersigned Registrant hereby undertakes that, for purposes of determining any liability under the Securities Act, each filing of the Registrant's annual report pursuant to Section 13(a) or Section 15(d) of the Exchange Act (and, where applicable, each filing of an employee benefit plan's annual report pursuant to Section 15(d) of the Exchange Act) that is incorporated by reference in the Registration Statement shall be deemed to be a new registration statement relating to the securities offered therein, and the offering of such securities at that time shall be deemed to be the initial *bona fide* offering thereof.
- (c) Insofar as indemnification for liabilities arising under the Securities Act may be permitted to directors, officers and controlling persons of the Registrant pursuant to the foregoing provisions, or otherwise, the Registrant has been advised that in the opinion of the Commission such indemnification is against public policy as expressed in the Securities Act and is, therefore, unenforceable. In the event that a claim for indemnification against such liabilities (other than the payment by the Registrant of expenses incurred or paid by a director, officer or controlling person of the Registrant in the successful defense of any action, suit or proceeding) is asserted by such director, officer or controlling person in connection with the securities being registered, the Registrant will, unless in the opinion of its counsel the matter has been settled by controlling precedent, submit to a court of appropriate jurisdiction the question whether such indemnification by it is against public policy as expressed in the Securities Act and will be governed by the final adjudication of such issue.

SIGNATURES

Pursuant to the requirements of the Securities Act of 1933, as amended, 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 Santa Clara, State of California on May 9, 2024.

SILVACO GROUP, INC.

By: /s/ Dr. Babak A. Taheri

Name: Dr. Babak A. Taheri Title: Chief Executive Officer

POWER OF ATTORNEY

KNOW ALL PERSONS BY THESE PRESENTS, that each person whose signature appears below constitutes and appoints Dr. Babak A. Taheri and Ryan Benton, and each of them acting alone, as his true and lawful attorney-in-fact and agent with full power of substitution, for him in any and all capacities, to sign any and all amendments to this registration statement, and to file the same, with all exhibits thereto and other documents in connection therewith, with the Securities and Exchange Commission, granting unto said attorney-in-fact, proxy and agent full power and authority to do and perform each and every act and thing requisite and necessary to be done in connection therewith, as fully for all intents and purposes as he might or could do in person, hereby ratifying and confirming all that said attorney-in-fact, proxy and agent, or his substitute, may lawfully do or cause to be done by virtue hereof.

Pursuant to the requirements of the Securities Act of 1933, as amended, this Registration Statement has been signed below by the following persons in the capacities indicated on May 9, 2024.

Signature	Title	Date
/s/ Dr. Babak A. Taheri Dr. Babak A. Taheri	Chief Executive Officer, and Director (Principal Executive Officer)	May 9, 2024
/s/ Ryan Benton Ryan Benton	Chief Financial Officer (Principal Financial and Accounting Officer)	May 9, 2024
/s/ Katherine S. Ngai-Pesic Katherine S. Ngai-Pesic	Chair of the Board	May 9, 2024
/s/ Dr. Hau L. Lee Dr. Hau L. Lee	Lead Independent Director	May 9, 2024
/s/ Anita Ganti Anita Ganti	Director	May 9, 2024
/s/ William H. Molloie Jr.	Director	May 9, 2024
/s/ Anthony K. K. Ngai	Director	May 9, 2024
/s/ Dr. Walden C. Rhines	Director	May 9, 2024
Dr. Walden C. Rhines /s/ Jodi L. Shelton Jodi L. Shelton	Director	May 9, 2024

Calculation of Filing Fee Table

Form S-8 (Form Type)

Silvaco Group, Inc.

(Exact Name of Registrant as Specified in its Charter)

Table 1: Newly Registered Securities

Security Type	Security Class Title	Fee Calculation Rule	Amount Registered ⁽¹⁾	Proposed Maximum Offering Price Per Unit	Maximum Aggregate Offering Price	Fee Rate	Amount of Registration Fee
Equity	Common Stock, par value \$0.0001 per share, Silvaco Group, Inc. 2024 Stock Incentive Plan	457(h)	3,654,533(2)(3)	\$19.00 ⁽⁴⁾	\$69,436,127	\$0.0001476	\$10,248.78
Equity	Common Stock, par value \$0.0001 per share, Silvaco Group, Inc. 2024 Employee Stock Purchase Plan	457(h)	312,500 ⁽⁵⁾	\$19.00(6)	\$5,937,500	\$0.0001476	\$876.38
Equity	Common Stock, par value \$0.0001 per share, Silvaco Group, Inc. 2014 Stock Incentive Plan	457(h)	4,370,745 ⁽⁷⁾	\$19.00(8)	\$83,044,155	\$0.0001476	\$12,257.32
Total Offering Amounts			\$158,417,782		\$23,382.48		
Total Fee Offsets							
Net Fee Due						\$23,382.48	

- (1) Pursuant to Rule 416(a) promulgated under the Securities Act of 1933, as amended (the "Securities Act"), this Registration Statement shall also cover any additional shares of common stock that become issuable under the plans set forth herein by reason of any stock dividend, stock split, recapitalization, or other similar transaction effected that results in an increase to the number of outstanding shares of common stock.
- (2) Represents (i) shares of common stock reserved for future issuance pursuant to stock options, restricted stock units ("RSUs"), and other awards under the Registrant's 2024 Stock Incentive Plan (the "2024 Plan") and (ii) additional shares of common stock that will become available for future issuance pursuant to equity awards under the 2024 Plan to the extent that RSUs and restricted stock awards outstanding under the Registrant's 2014 Amended and Restated Stock Incentive Plan (the "2014 Plan") immediately prior to the filing of this Registration Statement expire, terminate prior to settlement, are not issued because the award is settled in cash, are forfeited because of the failure to vest, or are reacquired or withheld (or not issued) to satisfy a tax withholding obligation. In addition, to the extent that any RSUs outstanding under the 2014 Plan expire, terminate prior to exercise or settlement, are not issued because the award is settled in cash, are forfeited because of the failure to vest, or are reacquired or withheld (or not issued) to satisfy a tax withholding obligation or the purchase or exercise price, the shares of common stock reserved for issuance pursuant to such stock options will become available for issuance under the 2024 Plan. See footnote 7 below.
- (3) The number of shares reserved for issuance under the 2024 Plan will automatically increase on January 1 of each calendar year for a period of ten years, commencing on January 1, 2025 and ending on (and including) January 1, 2034, in an amount equal to the lesser of (i) 3% of the total number of shares of common stock outstanding on December 31 of the preceding calendar year or (ii) the amount (including zero) that the compensation committee of the Registrant determines for purposes of the annual increase for that calendar year.
- (4) Estimated in accordance with Rule 457(h) promulgated under the Securities Act solely for the purpose of calculating the registration fee on the basis of the initial public offering price of \$19.00 per share of common stock pursuant to the Registration Statement on Form S-1 (File No. 333-278666), declared effective on May 8, 2024.
- (5) Represents shares of common stock reserved for future issuance under the Registrant's 2024 Employee Stock Purchase Plan (the "ESPP"). The number of shares reserved for issuance under the ESPP will automatically increase on January 1 of each year for a period of ten years, commencing on January 1, 2025 and ending on (and including) January 1, 2034, in an amount equal to the lesser of (i) 1% of the Registrant's outstanding shares on such date or (ii) the amount (including zero) that the compensation committee of the Registrant determines for purposes of the annual increase for that calendar year.
- (6) Estimated in accordance with Rule 457(h) promulgated under the Securities Act solely for the purpose of calculating the registration fee. The proposed maximum offering price per unit is based upon \$19.00, which is the initial public offering price per share of common stock pursuant to the Registrant's Registration Statement on Form S-1 (File No. 333-278666), declared effective on May 8, 2024, multiplied by 85%, which is the percentage of the price per share applicable to purchases under the ESPP.
- (7) Represents shares of common stock issuable pursuant to RSUs outstanding under the 2014 Plan immediately prior to the filing of this Registration Statement. The 2014 Plan has been terminated, and no further equity awards will be made pursuant to the 2014 Plan. The shares of common stock reserved for issuance pursuant to such RSUs will become available for issuance under the 2024 Plan to the extent any such shares (i) are not issued because such RSU or any portion thereof expires or otherwise terminates without all of the shares covered by such RSU having been issued, (ii) are not issued because such RSU or any portion thereof is settled in

cash, (iii) are forfeited back to or repurchased by the Registrant because of t reacquired to satisfy the exercise, strike, or purchase price, or (v) are withhe	the failure to meet a contingency or cond	ition required for the vesting of such RSUs, ing obligation. See footnote 3 above.	(iv) are withheld or

DLA Piper LLP (US) 3203 Hanover Street, Suite 100 Palo Alto, California 94304 www.dlapiper.com

T 650.833.2000 F 650.833.2001



May 9, 2024

Silvaco Group, Inc. 4701 Patrick Henry Dr., Building #23 Santa Clara. CA 95054

Ladies and Gentlemen:

As legal counsel for Silvaco Group, Inc., a Delaware corporation (the "Company"), we are rendering this opinion in connection with the registration on Form S-8 (the "Registration Statement") under the Securities Act of 1933, as amended (the "Securities Act"), of up to 3,654,533 shares (the "2014 Plan Shares") of the Company's common stock, par value \$0.0001 per share (the "Common Stock"), which may be issued pursuant to awards granted under the Company's Amended and Restated 2014 Stock Incentive Plan (the "2014 Plan"), up to 312,500 shares (the "2024 Plan Shares") of the Company's Common Stock, which may be issued pursuant to awards granted under the Company's 2024 Stock Incentive Plan (the "2024 Plan" and together with the 2014 Plan, the "Plans"), and up to 4,545,195 shares (the "ESPP Shares," and together with the 2014 Plan Shares and the 2024 Plan Shares, the "Shares") of Common Stock, which may be issued pursuant to purchases made under the Company's 2024 Employee Stock Purchase Plan (the "ESPP").

As the basis for the opinions hereinafter expressed, we have examined: (i) originals, or copies certified or otherwise identified, of (a) the Registration Statement and related prospectuses; (b) the Company's Amended and Restated Certificate of Incorporation and Amended and Restated Bylaws, each as currently in effect; (c) the Plans and the forms of agreements thereunder; (d) the ESPP; (e) certain resolutions of the Board of Directors and stockholders of the Company; and (f) such other instruments and documents as we have deemed necessary or advisable for the purposes of this opinion; and (ii) such statutes, including the Delaware General Corporation Law, and regulations as we have deemed necessary or advisable for the purposes of this opinion. In such examination, we have assumed the genuineness of all signatures and the authenticity of all documents submitted to us as originals and the conformity to the originals of all documents submitted to us as copies. As to certain factual matters, we have relied upon a certificate of an officer of the Company and have not independently verified any factual matter relating to this opinion.

We express no opinion concerning any law other than the law of the state of California, the corporation laws of the State of Delaware (including the statutory provisions, the applicable provisions of the Delaware Constitution and reported judicial decisions interpreting the foregoing) and the federal law of the United States. We have not obtained opinions of counsel licensed to practice in jurisdictions other than the state of California.

On the basis of the foregoing, we are of the opinion that each of the 2014 Plan Shares, the 2024 Plan Shares and the ESPP Shares, which may be issued under the 2014 Plan, the 2024 Plan or the ESPP, respectively, are duly authorized shares of the Company's Common Stock and when such Shares shall have been duly registered on the books of the transfer agent and registrar therefor in the name or on behalf of the purchasers and are issued by the Company in accordance with the terms of the Plans and the agreements thereunder, or the ESPP, as applicable, will be validly issued, fully paid and nonassessable.

We hereby consent to the filing of this opinion as an exhibit to the Registration Statement referred to above and we consent to the reference of our name wherever it appears in such Registration Statement. In giving this consent, we do not thereby admit that we are within the category of persons whose consent is required under Section 7 of the Securities Act, the rules and regulations of the Securities and Exchange Commission promulgated thereunder or Item 509 of Regulation S-K.

This opinion letter is given to you solely for use in connection with the issuance of the Shares in accordance with the Registration Statement and is not to be relied on for any other purpose. Our opinion is expressly limited to the matters set forth above, and we render no opinion, whether by implication or otherwise, as to any other matters relating to the Company, the Shares or the Registration Statement.

Very truly yours,

/s/ DLA Piper LLP (US)

DLA Piper LLP (US)

Consent of Independent Registered Public Accounting Firm

We consent to the incorporation by reference in this Registration Statement on Form S-8 of Silvaco Group, Inc., of our report dated March 15, 2024 (except for the effects of the stock split described in Note 2, as to which the date is April 30, 2024), relating to the consolidated financial statements of Silvaco Group, Inc. (the "Company") (which report expresses an unqualified opinion and includes an explanatory paragraph relating to the adoption of Accounting Standards Codification Topic No. 326), appearing in the Registration Statement on Form S-1 (No. 333-278666) of the Company for the years ended December 31, 2023 and 2022, filed with the Securities and Exchange Commission.

/s/ Moss Adams LLP

Campbell, California May 9, 2024