UNITED STATES SECURITIES AND EXCHANGE COMMISSION

Washington, D.C. 20549

FORM S-3

REGISTRATION STATEMENT UNDER THE SECURITIES ACT OF 1933

Aqua Metals, Inc.

(Exact name of registrant as specified in its charter)

Delaware

47-1169572

(State of incorporation)

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

2500 Peru Dr. McCarran, NV 89437 (775) 525-1936

(Address and telephone number of registrant's principal executive offices)

Stephen Cotton Chief Executive Officer 2500 Peru Dr. McCarran, NV 89437 (775) 525-1936

(Name, address and telephone number of agent for service)

Copy to:

Daniel K. Donahue Greenberg Traurig, LLP 3161 Michelson Drive, Suite 1000 Irvine, California 92612 (949) 732-6500

Approximate date of commencement of proposed sale to the public:

From time to time after the effective date of this registration statement.

If the only securities being registered on this Form are being offered pursuant to dividend or interest reinvestment plans, please check the following box: []

If any of the securities being registered on this Form are to be offered on a delayed or continuous basis pursuant to Rule 415 under the Securities Act of 1933, other than securities offered only in connection with dividend or interest reinvestment plans, check the following box: [X]

If this Form is filed to register additional securities for an offering pursuant to Rule 462(b) under the Securities Act, please check the following box and list the Securities Act registration statement number of the earlier effective registration statement for the same offering [X] 333-213501

If this Form is a post-effective amendment filed pursuant to Rule 462(c) under the Securities Act, check the following box and list the Securities Act registrations statement number of the earlier effective registration statement for the same offering. []

If this Form is a registration statement pursuant to General Instruction I.D. or a post-effective amendment thereto that shall become effective upon filing with the Commission pursuant to Rule 462(e) under the Securities Act, check the following box. []

If this Form is a post-effective amendment to a registration statement filed pursuant to General Instruction I.D. filed to register additional securities or additional classes of securities pursuant to Rule 413(b) under the Securities Act, check the following box. []

Indicate by check mark whether the registrant is a large accelerated filer, an accelerated filer, a non-accelerated filer, a smaller reporting company or an emerging growth company (as defined in Rule 12b-2 of the Act):

Large accelerated filer []

Accelerated filer [X]

Non-accelerated filer []

Smaller reporting company [X]

Emerging growth company [X]

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 Securities Act. [X]

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

Title of each class
Common Stock, par value \$0.001 per share

Trading Symbol(s)
AQMS

Name of each exchange on which registered Nasdaq Capital Market Title of each class of securities
to be registeredProposed Maximum Aggregate
Offering Price(1)Amount of
registration fee(2)Common Stock, par value \$0.001 per share\$ 4,231,315\$ 513

- The Registrant previously registered securities at an aggregate offering price not to exceed \$100,000,000 on a Registration Statement on Form S-3 (File No. 333-213501), which was declared effective on September 26, 2016, and as supplemented by that certain prospectus supplement dated May 9, 2019 (the "Prior Registration Statement"). In accordance with Rule 462(b) under the Securities Act of 1933, as amended, an additional number of securities having a proposed maximum aggregate offering price of \$4,231,315 is hereby registered, which includes shares issuable upon the exercise of the underwriters' option to purchase additional shares, representing no more than 20% of the maximum aggregate offering price of unsold securities under the Prior Registration Statement. In no event will the maximum aggregate offering price of all securities issued pursuant to this Registration Statement and the Prior Registration Statement exceed that registered under such registration statements.
- (2) Calculated pursuant to Rule 457(o) under the Securities Act based on the proposed maximum aggregate offering price of all securities listed.

This Registration Statement shall become effective upon filing with the Securities and Exchange Commission in accordance with Rule 462(b) promulgated under the Securities Act of 1933, as amended.

EXPLANATORY NOTE

This Registration Statement is being filed with the Securities and Exchange Commission (the "Commission") pursuant to Rule 462(b) under the Securities Act of 1933, as amended, and General Instruction IV of Form S-3. This Registration Statement relates to the shelf registration statement on Form S-3 (File Number 333-213501) (the "Prior Registration Statement") declared effective on September 26, 2016 by the Commission, and is being filed for the purpose of registering up to \$4,231,315 additional aggregate dollar amount of shares of the Registrant's common stock, in one or more offerings, in amounts, at prices and on terms that the Registrant will determine at the time of the offering and which will be set forth in a prospectus supplement, which may also add, update or change information contained in this prospectus. The Registrant hereby incorporates by reference into this Registration Statement on Form S-3 in its entirety the Prior Registration Statement, including each of the documents filed by the Registrant with the Commission and incorporated or deemed to be incorporated by reference therein and all exhibits thereto.

PART II – INFORMATION NOT REQUIRED IN PROSPECTUS

Item 16. Exhibits

| Exhibit No. | Description |
|----------------|---|
| 5.1 | Opinion of Greenberg Traurig, LLP* |
| 23.1 | Consent of Armanino LLP* |
| 23.2 | Consent of Greenberg Traurig, LLP (included in Exhibit 5.1) |
| * Filed herew | ith. |
| | -2- |

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-3 and has duly caused this registration statement to be signed on its behalf by the undersigned, thereunto duly authorized, in Reno, Nevada on May 10, 2019.

Aqua Metals, Inc.

By: /s/ Stephen Cotton
Stephen Cotton
Chief Executive Officer

Pursuant to the requirements of the Securities Act of 1933, this Registration Statement has been signed on May 10, 2019 by the following persons in the capacities indicated.

| Signature | Title |
|--|---|
| /s/ Stephen Cotton Stephen Cotton | President, Chief Executive Officer and Director (Principal Executive Officer) |
| /s/ Judd Merrill Judd Merrill | Chief Financial Officer (Principal Financial and Accounting Officer) |
| /s/ S. Shariq Yosufzai S. Shariq Yosufzai | Chairman of the Board |
| /s/ Vincent L. DiVito Vincent L. DiVito | Director |
| /s/ Gayle Gibson Gayle Gibson | Director |
| /s/ Mark Stevenson Mark Stevenson | Director |
| /s/ Sushil Kapoor Sushil Kapoor | Director |
| | -3- |

GREENBERG TRAURIG, LLP 3161 Michelson Drive, Suite 1000 Irvine, California 92612

May 10, 2019

Aqua Metals, Inc. 2500 Peru Dr. McCarran, NV 89437

Re: Registration Statement on Form S-3

Ladies and Gentlemen:

We have acted as counsel to Aqua Metals, Inc., a Delaware corporation (the "Company"), in connection with the Registration Statement on Form S-3 (the "462(b) Registration Statement") to be filed with the Securities and Exchange Commission under the Securities Act of 1933, as amended (the "Act"), by the Company pursuant to Rule 462(b) promulgated under the Act relating to the registration by the Company under the Act of shares (the "Additional Shares") of common stock, par value \$0.001 per share, of the Company having an aggregate offering price of up to \$4,231,315. In accordance with General Instruction IV of Form S-3, the 462(b) Registration Statement incorporates by reference the Registration Statement on Form S-3 (Registration No. 333-213501) (including all amendments and exhibits thereto and all information incorporated by reference therein, the ("Registration Statement"), which was declared effective by the Commission on September 26, 2016.

You have requested our opinion as to the matters set forth below in connection with the 462(b) Registration Statement. For purposes of rendering this opinion, we have examined the 462(b) Registration Statement and the Registration Statement, forms of the First Amended and Restated Certificate of Incorporation and the Second Amended and Restated Bylaws of the Company currently in effect, and we have made such other investigation as we have deemed appropriate. We have examined and relied upon certificates of public officials and, as to certain matters of fact that are material to our opinion, we have also relied on a certificate of an officer of the Company. We have not independently verified the matters set forth in such certificates.

We express no opinion herein as to the laws of any state or jurisdiction other than the General Corporation Law of the State of Delaware and the federal laws of the United States of America.

Based upon and subject to the foregoing, it is our opinion that when (i) specifically authorized for issuance by proper action of the Company's Board of Directors or an authorized committee (the "Authorizing Resolutions"), (ii) the terms of the issuance and sale of the Additional Shares have been duly established in conformity with the First Amended and Restated Certificate of Incorporation and Second Amended and Restated Bylaws, (iii) the Additional Shares have been issued and sold as contemplated by the Registration Statement, the Prospectus and the applicable prospectus supplement, and (iv) the Company has received the consideration provided for in the Authorizing Resolutions and the applicable underwriting agreement or other purchase agreement and such consideration per share is not less than the par value per share of the Additional Shares, such Additional Shares will be validly issued, fully paid and nonassessable.

We hereby consent to the filing of this opinion as an exhibit to the 462(b) Registration Statement and to the reference to our name under the caption "Legal Matters" in the prospectus made part of the Registration Statement.

Very truly yours,

/s/ GREENBERG TRAURIG, LLP

CONSENT OF INDEPENDENT REGISTERED PUBLIC ACCOUNTING FIRM

We consent to the incorporation by reference in this Registration Statement of Aqua Metals, Inc. on Form S-3 of our report dated February 28, 2019, with respect to our audit of the consolidated financial statements of Aqua Metals, Inc. as of December 31, 2018. We also consent to the reference to our Firm under the heading "Experts" in such Prospectus.

/s/ Armanino LLP

San Ramon, California May 10, 2019