

AGREEMENT AND PLAN OF MERGER

AMONG

VEECO INSTRUMENTS INC.,

VEECO ACQUISITION CORP.,

ION TECH, INC.

AND

CERTAIN OF

ITS SECURITYHOLDERS

October 14, 1999

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Exhibit A-1 Articles of Merger to be filed with the Secretary of State of the State of Colorado

Exhibit A-2 Certificate of Merger to be filed with the Secretary of State of the State of Delaware

Exhibit B FIRPTA Notification Letter; Form of Notice to Internal Revenue Service together with written authorization from the Company

Exhibit C-1 Company Affiliates Agreement

Exhibit C-2 Veeco Affiliates Agreement

Exhibit D Registration Rights Agreement

Exhibit E Irrevocable Proxy

Exhibit F Employment and Noncompetition Agreement

Exhibit G Escrow Agreement

Exhibit H Real Estate Merger Agreement

Exhibit I Opinion of The Dow Law Firm and Sherman & Howard, LLC

Exhibit J Opinion of Kaye, Scholer, Fierman, Hays & Handler, LLP

Exhibit K Investment Agreement

AGREEMENT AND PLAN OF MERGER

This AGREEMENT AND PLAN OF MERGER (this "Merger Agreement"), is made as of October 14, 1999, by and among Veeco Instruments Inc., a Delaware corporation ("Veeco"), Veeco Acquisition Corp., a Delaware corporation and a wholly-owned subsidiary of Veeco ("Acquisition"), Ion Tech, Inc., a Colorado corporation (the "Company"), and the stockholders listed on Schedule 1.01 hereof (the "Party Stockholders").

The Boards of Directors of the Company, Acquisition and Veeco have determined that it is advisable and in the best interests of their respective stockholders for Acquisition to merge with and into the Company with the result that the Company shall be the surviving corporation and shall become a wholly-owned subsidiary of Veeco (the "Merger"), upon the terms and conditions set forth herein and in accordance with the provisions of the Colorado Business Corporation Act (the "CBCA") and the Delaware General Corporation Law (the "DGCL").

NOW, THEREFORE, in consideration of the mutual covenants set forth herein, it is agreed as follows:

I. DEFINITIONS.

1.01 Certain Definitions. For purposes of this Merger Agreement, the following terms shall have the following meanings:

- (a) "Acquisition" shall have the meaning set forth in the first paragraph of this Merger Agreement.
- (b) "Affiliate" of any Person shall mean a Person which directly or indirectly through one or more intermediaries, controls, or is controlled by, or is under common control with, such Person.
- (c) "Articles of Merger" shall have the meaning set forth in Section 2.02.
- (d) "Benefit Plans" shall have the meaning set forth in Section 3.14(a).
- (e) "CBCA" shall have the meaning set forth in the recitals to this Merger Agreement.
- (f) "Closing" shall have the meaning set forth in Section 2.03.
- (g) "Closing Date" shall have the meaning set forth in Section 2.03.
- (h) "COBRA" shall have the meaning set forth in Section 3.14(f).

AGREEMENT AND PLAN OF MERGER
Among
ION Tech, Inc. and Veeco Instruments Inc.

Pages 2-21 redacted.

engaged in any “prohibited transaction,” as defined in Section 4975 of the Code or Section 406 of ERISA, with respect to any Benefit Plan, nor have there been any fiduciary violations under ERISA which could subject the Company (or any officer, director or employee thereof) to any penalty or Tax under Section 502(i) of ERISA or Sections 4971 and 4975 of the Code.

(h) With respect to any Benefit Plan: (i) no filing, application or other matter is pending with the IRS, the PBGC, the United States Department of Labor or any other governmental body, (ii) there is no action, suit or claim pending or Threatened, other than routine claims for benefits and (iii) there are no outstanding liabilities for Taxes, penalties or fees.

(i) Neither the execution and delivery of this Merger Agreement nor the consummation of any or all of the contemplated transactions will: (i) entitle any current or former employee of the Company to severance pay, unemployment compensation or any similar payment, (ii) accelerate the time of payment or vesting or increase the amount of any compensation due to any such employee or former employee or (iii) directly or indirectly result in any payment made or to be made to or on behalf of any person to constitute a “parachute payment” within the meaning of Section 280G of the Code.

3.15 Intellectual Property.

(a) “Intellectual Property” shall mean all new and useful inventions, discoveries and all letters patent (including, but not limited to, all reissues, extensions, renewals, divisions and continuations thereof and thereto (including continuations-in-part)) and all applications therefor; all copyrights, mask works, trademarks and service marks and all registrations and applications for registration thereof; all trade secrets, know-how, algorithms, methods, processes, protocols, methodologies, computer software (including, but not limited to, source code in object code and source code form), design, functional, technical and other specifications (for computer software and other properties) and all other tangible and intangible proprietary materials and information required for the conduct of the business of the Company. For the purposes of this Section 3.15, “Use” (and, as the context requires, “Used”) means the right to use, including, without limitation, the right to make modifications and prepare derivative works.

(b) Except as set forth on Schedule 3.15(b), with respect to the Intellectual Property which the Company owns, and to the extent of its rights therein, after the Merger, the Surviving Corporation shall have the right to (i) sue for (and otherwise assert claims for) and shall have no limitation on its ability to recover damages and obtain any and all other appropriate remedies available at law or equity for any past, present or future infringement, misappropriation or other violation thereof (and settle all such suits, actions and proceedings); (ii) seek appropriate protection therefor (including, where appropriate, the right to seek copyright, trademark and service mark registrations and letters patent in the United States and all other countries and governmental divisions); and (iii) claim all rights and priority thereunder, in each case, to the extent, if any, that the Company is entitled to do so prior to the Merger.

(c) The Company does not own, have an interest in or have a right under

any license agreement to use any foreign patent or any application therefor. The Company does not own, have an interest in or have a right under any copyright or any application therefor. Schedule 3.15(c) sets forth a complete and accurate list (i) in subsection 1, of all letters patent owned by the Company; and (ii) in subsection 2, of all U.S. Federal trademark and service mark registrations owned by the Company. The Company does not own, have an interest in or have a right under any U.S. common law trademarks or service marks. No U.S. letter patent owned by the Company is, as of the date hereof, subject to a reissue proceeding in the U.S. Patent and Trademark Office (the “PTO”). No applications for U.S. letters patent have been filed by and are subject to ongoing prosecution by the Company. No applications for letters patent in jurisdictions other than the United States have been filed by and are subject to ongoing prosecution by the Company. No applications for U.S. Federal trademark or service mark registrations have been filed by and are subject to ongoing prosecution by the Company. No applications for trademark or service mark registrations in jurisdictions other than the United States have been filed by and are subject to ongoing prosecution by the Company. The Company has not been involved in any patent interference or similar proceedings including, but not limited to, interferences and the like asserted against the Company and interferences and the like which the Company has provoked.

(d) Except as set forth in Schedule 3.15(d), (i) all authorship in the computer software, documentation, software design, technical and functional software specifications created by the Company and used in products or services created by the Company is original and (ii) all computer software and related documentation manuals contained or Used in products of (including documentation and product and user manuals) or services provided by the Company are owned by or licensed to the Company, and such licenses provide the Company with the right to sublicense or otherwise authorize use of the licensed subject matter to their customers and authorized third party users.

(e) (i) Except for third parties which have rights pursuant to the agreements set forth in Schedule 3.15(f)(ii) and except for rights granted to the customers of the Company, the Company has the sole and exclusive right to Use, sell and license each of the copyrights owned by the Company and to make, Use, sell and license each item of Intellectual Property listed in Schedule 3.15(c) hereto (the foregoing collectively referred to as “Company-Owned IP Registrations”) and (ii) except as set forth in Schedule 3.15(e), the Company has no knowledge that any of the Company-Owned IP Registrations are invalid, unenforceable or not subsisting. With the exception of copyright rights, all Company-Owned IP Registrations have been and currently remain duly registered with or issued by the appropriate governmental agency of the United States or of foreign countries as indicated in Schedule 3.15(c), and all required maintenance and annuity fees have been paid in full to and all declarations required pursuant to 15 U.S.C. Sections 1058 and 1065 (and foreign counterparts to the same) have been accepted by the proper governmental authority.

(f) (i) Schedule 3.15(f)(i) sets forth a complete and accurate list of the agreements, including, but not limited to, license agreements, and of all parties thereto under which the Company obtains or is the beneficiary of any license or right to use any Intellectual Property right of any third party (singularly or collectively, a “Licensed-In Agreement” or the “Licensed-In

Agreements”) and (ii) Schedule 3.15(f)(ii) sets forth a complete and accurate list of the material agreements, including, but not limited to, license agreements, to which the Company is a party and pursuant to which a third party is authorized to Use any of the Intellectual Property rights of the Company.

(g) Except as set forth in Schedule 3.15(g), each of the copyrights owned by the Company and each item of Intellectual Property listed in the Schedules delivered pursuant to Section 3.15(c) hereto (the “Company-Owned IP”) (i) is free and clear of any attachments, liens, security interests, UCC filings or any other encumbrances; (ii) is not subject to any outstanding judicial order, decree, judgment or stipulation or to any agreement restricting the scope of the Company’s use thereof; and (iii) together with each item of Intellectual Property which the Company has a right to Use or practice pursuant to one or more Licensed-In Agreements, is not subject to any suits, actions, claims or demands of any third party and no action or proceeding, whether judicial, administrative or otherwise, has been instituted, is pending or, to the Company’s knowledge, Threatened which challenges or affects the rights of the Company in the same.

(h) Except as set forth in Schedule 3.15(h), (i) the Company has not received any claim that, any cease and desist or equivalent letter regarding, or any other notice of any allegation to the effect that any of the Company’s products, software, apparatus, methods or services which the Company makes, Uses, sells, offers or provides infringes upon, misappropriates or otherwise violates the Intellectual Property of any third party; (ii) the Company has no knowledge of any unauthorized Use by, unauthorized disclosure to or by or infringement, misappropriation or other violation of any of its Intellectual Property by any third party or any current or former officer, employee, independent contractor, consultant or any other agent of the Company (a “Company Agent” or the “Company Agents”); (iii) the Company has not entered into any agreement to indemnify any third party against any claim of infringement, misappropriation or other violation of Intellectual Property rights other than indemnification provisions contained in purchase orders, customer agreements, Licensed-In Agreements or software licenses arising in the ordinary course of business; and (iv) during the last ten (10) years the Company has not been charged in any suit, action or proceeding with, or has charged others with, unfair competition, infringement, misappropriation, wrongful use of or any other violation or improper or illegal activity with respect to or affecting Intellectual Property or with claims contesting the validity, ownership or right to make, Use, sell, license or dispose of Intellectual Property.

(i) Except as set forth in Schedule 3.15(i), all computer software created by employees of the Company within the scope of their employment by the Company and used in Company products or services and all original copyrightable authorship therein is owned by the Company.

(j) Except as set forth in Schedule 3.15(j), the Intellectual Property owned by, licensed to or Used by the Company prior to the execution of this Agreement will enable the Surviving Corporation subsequent to the Effective Time to fully carry on without restriction all aspects of the business of the Company as and to the extent such business was carried on by the Company prior to the Merger. Except as set forth in Schedule 3.15(j), the Company either owns all

AGREEMENT AND PLAN OF MERGER
Among
ION Tech, Inc. and Veeco Instruments Inc.

Pages 25-49 redacted.

IN WITNESS WHEREOF, the parties have executed this Merger Agreement as of the date first above written.

VEECO INSTRUMENTS INC.

By: _____
Name:
Title:

ION TECH, INC.

By: *Gerald C Isaacson*
Name: *Gerald C Isaacson*
Title: *President*

VEECO ACQUISITION CORP.

By: _____
Name:
Title:

Paul Reader
Paul Reader

Gerald Isaacson
Gerald Isaacson

Paul J. Wilbur
Paul J. Wilbur

IN WITNESS WHEREOF, the parties have executed this Merger Agreement as of the date first above written.

VEECO INSTRUMENTS INC.

By: Edward H. Braun
Name: EDWARD H. BRAUN
Title: CHAIRMAN, CHIEF EXECUTIVE OFFICER,
AND PRESIDENT
ION TECH, INC.

By: _____
Name:
Title:

VEECO ACQUISITION CORP.

By: Edward H. Braun
Name: EDWARD H. BRAUN
Title: PRESIDENT

Paul Reader

Gerald Isaacson

Paul J. Wilbur

(i) Patent #4652769: Modular Power Supply

(ii) **SOURCERER™**

SPECTOR™

CYCLONE™

Ion Tech, Inc. (*Registered logo*)