

# SECURITIES AND EXCHANGE COMMISSION

## FORM S-3/A

Registration statement for specified transactions by certain issuers [amend]

Filing Date: **1999-07-27**  
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### FILER

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#### **CHROMATICS COLOR SCIENCES INTERNATIONAL INC**

CIK: **892495** | IRS No.: **133253392** | State of Incorporation: **NY** | Fiscal Year End: **1231**  
Type: **S-3/A** | Act: **33** | File No.: **333-82071** | Film No.: **99671014**  
SIC: **3826** Laboratory analytical instruments

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As filed with the Securities and Exchange Commission on July 27, 1999  
Registration No. 333-82071

SECURITIES AND EXCHANGE COMMISSION  
Washington D.C. 20549

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AMENDMENT NO.1

TO  
FORM S-3

REGISTRATION STATEMENT UNDER THE SECURITIES ACT OF 1933

Chromatics Color Sciences International, Inc.  
(Exact Name of Registrant as Specified in its Charter)

New York 13-3253392  
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(State of Incorporation) (I.R.S. Employer Identification No.)

5 East 80th Street, New York, NY 10021 (212) 717-6544  
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(Address, Including Zip Code, and Telephone Number, Including  
Area Code, of Registrant's Principal Executive Offices)

Darby S. Macfarlane  
Chairperson of the Board and Chief Executive Officer  
5 East 80th Street, New York, NY 10021 (212) 717-6544  
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(Address, Including Zip Code, and Telephone Number, Including  
Area Code, of Agent for Service)

With a copy to:  
Jeffrey E. LaGueux, Esq.  
Patterson, Belknap, Webb & Tyler LLP  
1133 Avenue of the Americas, New York, NY 10036-6710 (212) 336-2000

Approximate date of commencement of proposed sale to the public: As soon as practicable 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 being 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 pursuant to Rule 462(b) under the Securities Act of 1933, please check the following box and list the Securities Act of 1933 registration statement number of the earlier effective registration statement for the same offering. ( )

If this form is a post-effective amendment filed pursuant to Rule 462(c) under the Securities Act of 1933, check the following box and list the Securities Act of 1933 registration statement number of the earlier effective registration statement for the same offering. ( )

If delivery of the prospectus is expected to be made pursuant to Rule 434, please check the following box. ( )

<TABLE>  
<CAPTION>

Calculation of Registration Fee

Title of Shares 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 (3)
<S> common stock, par value \$.001	<C> 3,241,380 shares	<C> \$8.4375	<C> \$27,349,143.75	<C> \$7,603.06

</TABLE>

- (1) Represents the total shares of common stock (i) issuable upon conversion of 14% senior convertible debentures issued by Registrant in the principal amount of \$5 million on April 15, 1999, plus all interest accrued thereon at maturity on April 15, 2002, at a conversion price of \$5.00; (ii) issuable upon conversion of (a) 40,000 shares of convertible preferred stock issued by Registrant for aggregate proceeds of \$4 million on June 15, 1999 and (b) 40,000 shares of convertible preferred stock issuable by Registrant for aggregate proceeds of \$4 million on June 15, 1999, plus all dividends accrued thereon at a rate of 8% during the period from June 15, 2002 to June 15, 2004, at a conversion price of \$7.25 per share; and (iii) issuable upon the exercise of (a) 270,690 warrants issued by Registrant on June 15, 1999 and (b) 270,690 warrants issuable by Registrant, at an exercise price of \$8.25 per share.
- (2) Estimated solely for the purpose of calculating the registration fee. Such estimates have been calculated in accordance with Rule 457(c) under the Securities Act of 1933 and are based upon the average of the high and low prices per share of the Registrant's common stock on the Nasdaq SmallCap Market on June 28, 1999.
- (3) Paid on June 30, 1999.

The Registrant hereby amends this Registration Statement on such date or dates as may be necessary to delay its effective date until the Registrant shall file a further amendment which specifically states that this Registration Statement shall thereafter become effective in accordance with Section 8(a) of the Securities Act of 1933 or until the Registration Statement shall become effective on such date as the Commission, acting pursuant to said Section 8(a), may determine.

The information contained in this prospectus is not complete and may be changed. These securities may not be sold until the Registration Statement filed with the Securities and Exchange Commission is effective. This prospectus is not an offer to sell these securities and is not soliciting an offer to buy these securities in any State where the offer or sale is not permitted.

Subject to Completion, dated July 27, 1999

Prospectus

CHROMATICS COLOR SCIENCES  
INTERNATIONAL, INC.

3,241,380 Shares of Common Stock  
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The selling stockholders named in this prospectus are offering and selling up to 3,241,380 shares of our common stock. These shares were acquired by the selling stockholders upon the exercise of convertible debt securities, convertible

preferred stock and warrants sold by us to the selling stockholders in private financings.

The selling stockholders may sell the shares of common stock described in this prospectus in a number of different ways. The prices at which the selling stockholders may sell the shares of common stock will be determined by prevailing market prices for the shares or by negotiated transactions. We will not receive any of the proceeds from the sale of shares, but we will receive the exercise price of the warrants.

Our common stock is listed on the Nasdaq SmallCap Market under the symbol "CCSI." On June 28, 1999 the closing sales price of our common stock on the Nasdaq SmallCap Market was \$8.25.

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You should read the description of certain risks under the caption "Risk Factors" beginning on page 6 before purchasing any of the common stock offered by this prospectus.

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The shares offered or sold under this prospectus have not been approved or disapproved by the Securities and Exchange Commission or any state securities commission, nor have these organizations determined that this prospectus is accurate or complete. Any representation to the contrary is a criminal offense.

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The date of this prospectus is July \_\_, 1999.

#### About This Prospectus

This prospectus is a part of a registration statement on Form S-3 filed by us with the Securities and Exchange Commission to register 3,241,380 shares of our common stock on behalf of the selling stockholders described below. This prospectus does not contain all of the information set forth in the registration statement, certain parts of which are omitted in accordance with the rules and regulations of the SEC. Accordingly, you should refer to the registration statement and its exhibits for further information about us and our common stock. Copies of the registration statement and its exhibits are on file with the SEC. Statements contained in this prospectus concerning the documents we have filed with the SEC are not intended to be comprehensive, and in each instance we refer you to the copy of the actual document filed as an exhibit to the registration statement or otherwise filed with the SEC. Each such statement is qualified in its entirety by such reference.

You should rely only on the information provided or incorporated by reference in this prospectus and the registration statement. We have not authorized anyone to provide you with different information. The information contained in this prospectus is accurate only as of the date of this prospectus, regardless of the time of delivery of this prospectus or of any sale of common stock.

Please note that references in this prospectus to "we," "our" or "us" refer to Chromatics Color Sciences International, Inc. and not to the selling stockholders.

#### General Information About CCSI

We are a color science technology company engaged in the business of researching, developing and commercializing certain intellectual property rights, technology and instrumentation we have developed which relate to the application of color science technology to the scientific measurement, and the analysis and classification of the measurements, of:

- human skin,
- tissue,
- fluid,

- hair,
- teeth or
- biological subject,

the detection and monitoring of conditions affecting the coloration of such human skin, tissue, fluid, hair, teeth or biological subjects and the scientific classification and color-oriented organization of various consumer-sensitive products such as:

- cosmetics,
- tooth enamel,
- hair color,
- hosiery,
- fashion,
- textiles, etc.

We have incorporated some of these intellectual property rights, technology and instrumentation into a proprietary color measurement system and software marketed for various applications known as the ColorMate(Registered) System. We have developed our intellectual property and the ColorMate(Registered) System for:

- the scientific measurement and classification of human skin color;
- the scientific measurement of human hair, tooth, tissue and/or fluid color;
- the scientific color coordination of such skin, hair, tooth and/or fluid color classification in relation to products;
- the scientific measurement, classification and color-oriented organization of various color sensitive consumer products such as cosmetics, hair coloring, hosiery, clothing, tooth enamel, paint and textiles;
- the scientific color measurement in detecting and monitoring certain diseases which we believe can be diagnosed or monitored by the coloration of human skin, tissue and fluids, such as newborn bilirubinemia (infant jaundice); and
- the scientific color coordination of products in relation to other products.

We determine such scientific product color classifications by conducting laboratory product chromaticity studies.

We believe that our ColorMate(Registered) System can be marketed for various commercial applications in a variety of industries, including the cosmetic, hair color, beauty aid and fashion industries for cosmetics, hair color, custom blended foundation makeup, hosiery, clothing and accessories, the dental industry for matching the exact color of teeth caps, bonding and dentures for both dentists' offices and dental laboratories and the medical industry for the diagnosis and monitoring of certain conditions, disorders and diseases which are diagnosed or monitored by the coloration of human skin, tissue or fluid being affected, such as anemia, hepatitis, tuberculosis and newborn infant jaundice.

We have also developed our own line of scientifically color coordinated proprietary cosmetics (My Colors by Chromatics(Trademark)) and scientifically color coordinated proprietary color charts and material swatchpacks for use in the cosmetics, beauty, dental and fashion industries.

Color science involves the objective standardized analysis, description and scientific measurement by instrument of the colors composing the visual color spectrum and their related physical properties in relation to each other. Historically, analysis of all aspects of color

could only be performed through the subjective visual perception of the observer. Beginning in the 1930s, however, photoelectric instruments for objectively measuring colors became available. Since that time, increasingly precise methodologies and instruments have been developed and refined.

Our ColorMate(Registered) System consists of (i) a scientific color measurement instrument to be held against a subject's skin, hair, teeth or sample, (ii) a series of filters and a computer and (iii) related proprietary software all housed in a portable briefcase. The color measurement instrument used within our ColorMate(Registered) System or as a hand-held, battery operated instrument is used in all of our medical, cosmetic and other applications. The instrument is held against the subject's skin, hair, teeth or sample and performs scientific color measurement of coloration and luminosity. In skin color analysis, our software analyzes the color measurement taken and assigns the subject to one of the approximately 200 scientific skin color categories we have identified through our research and development efforts. In the medical application for monitoring infant jaundice, the instrument measures the incremental yellow content of the skin and provides a numerical index in milligrams/deciliters or micro moles correlating to the serum bilirubin concentration within a clinically useful range.

We believe that our intellectual property is capable of detecting and monitoring various diseases, such as bilirubin infant jaundice. In this regard, we have received FDA clearance for commercial marketing of our ColorMate(Registered) TLC BiliTest(Trademark) System for monitoring of newborn bilirubinemia (infant jaundice) in infants through the non-invasive scientific color measurement of the skin of the newborn. We have also completed feasibility studies and commenced ongoing clinical trials of our ColorMate(Registered) System for dermatology applications in determining the level of phototherapy to be used in treating certain skin disorders and diseases, such as psoriasis, and the patients' tolerance to such phototherapy treatment. This use of the ColorMate(Registered) System will require additional FDA clearance through submission of an S10(k) on pre-market approval applications supported by clinical data.

In July 1998 we received clearance by the U.S. Food and Drug Administration for commercial marketing of our ColorMate(Registered) TLC BiliTest(Trademark) System device for the non-invasive monitoring of newborn bilirubinemia (infant jaundice) by healthcare professionals in the hospital, institutional, pediatricians' office or home setting. Our FDA market clearance authorizes use of our technology as an aid to the physician in monitoring the status of newborn babies for the development of newborn bilirubinemia (infant jaundice). Following a physician's examination of a newborn within the first hours of birth, newborn babies would be measured initially and monitored periodically by the ColorMate(Registered) TLC BiliTest(Trademark) System for incremental changes in the yellow content of their skin. Almost all newborns develop some degree of infant jaundice and very high bilirubin levels, if left untreated, may, in extreme cases, lead to permanent brain damage or death. Infant jaundice occurs in most newborns because of a combination of increased bilirubin production, a waste product that is normally produced from the breakdown of red blood cells, and decreased clearance of bilirubin by the liver. Prior to birth, the bilirubin in an infant is processed by the mother's liver and excreted. After birth, an infant must eliminate bilirubin independent of its mother, and it may take an infant's system several days to begin eliminating the bilirubin faster than it is being produced.

The initial screening of bilirubin levels is the observation of the yellowing of the skin by professional care providers, which is a subjective determination prone to errors due to different skin colors. If the initial clinical assessment suggests the possibility of significant elevated bilirubin levels, the current procedure requires that a blood sample be obtained from the infant, usually by a so-called "heelstick" (lancing the infant's heel). We believe that a non-invasive instrument that monitors infant jaundice represents a significant improvement in patient care.

Our ColorMate(Registered) TLC BiliTest(Trademark) System monitors the incremental change of the yellow content of the skin color in infants of all races by scientifically measuring the color of the skin of the newborn. Color measurements are obtained by placing the device on different physical sites of the newborn for 5-10 seconds. Accuracy of the color measurements is ensured by

the TLC Lensette(Trademark), a proprietary disposable color-calibration and verification standard and a protective shield to prevent cross contamination between parties used prior to each baby's measurement. Each color measurement of the skin is analyzed by our proprietary technology to provide an estimate in milligrams/deciliters calculating the newborn's serum bilirubin concentration within a clinically useful range.

We believe that our intellectual property and ColorMate(Registered) System may have commercial applications in industrial color measurement applications, in order to achieve and confirm uniformity of color shades within a given product line or between two products of the same line (i.e., paint, textile and food products). To that end, we intend to increase our efforts to lease our ColorMate(Registered) System and/or license our intellectual property, including our chromaticity study capabilities, to industrial companies such as paint, textile and food companies, that use or could use existing color measurement technologies in the manufacturing and marketing of their own products. Many companies in these industries currently use color measurement instruments to ensure uniformity of product line color (e.g., that manufacturing facilities are producing different dye lots and/or goods of the same color). These instruments are generally available at prices well in excess of the price at which we would market our ColorMate(Registered) System for such applications, because we have been able to mass manufacture our color measurement technology, thereby taking advantage of the economies of scale. In addition, the ColorMate(Registered) System provides machine-to-machine stability (i.e., that each machine will achieve results consistent with that of other machines), whereas the competing color measurement instruments available today generally cannot produce consistent machine-to-machine results without complex inter-machine calibration adjustments.

In November 1998, we opened our medical division, supervised by Sheila Kempf, Vice President Medical Division. Ms. Kempf is a former Vice President-Marketing of Corometrics, a Marquette Medical Inc. company, and a former Director of Marketing for sensors and accessories of Nelcor Puritan Bennet, Inc. and has over 13 years experience in the medical marketing field. We also hired neonatal nurse clinical specialists to provide training to hospital staffs using our ColorMate(Registered) TLC BiliTest(Trademark) System. The newly-formed medical division provides sales support for the ColorMate(Registered) TLC BiliTest(Trademark) System delivered to consumers in the medical community, including hospitals, pediatricians, clinics and home health care agencies, and performs delivery, training and in-servicing for customers initially generated by our presentations to the medical community.

In November 1998 we entered into a manufacturing agreement for the production of our ColorMate(Registered) TLC BiliTest(Trademark) System and in February 1999 we began making limited shipments of this product.

In January 1999, we formed a five-person sales unit to be led by Dennis A. McClinton, Vice President of Sales. Mr. McClinton has an 18-year background in sales of fetal and neonatal ICU monitoring products at Marquette Medical Systems and will head a staff that averages ten years experience in that field. This new unit is responsible for the initial sales activity for our ColorMate(Registered) TLC BiliTest(Trademark) System. The ColorMate(Registered) TLC BiliTest(Trademark) System as currently marketed by our medical division has a list price of \$3,000 to \$6,000 depending on the model and may be leased or used under the limited time offer for use and evaluation of the system, all with either purchase of minimum monthly supplies of the TLC Lensette (Trademark) calibration standards at \$10 per TLC Lensette(Trademark), or minimum monthly charges of \$10 per use under a managed use program.

3

In June 1999 we entered into an agreement for the exclusive distribution of this product in the hospital, pediatricians' offices and home healthcare markets including clinics related to these markets in the United States with Datex-Ohmeda, Inc. and its Ohmeda Medical Division.

On April 15, 1999, we completed the private placement of \$5 million in principal amount of 14% senior convertible debentures to certain of the selling

stockholders for aggregate proceeds of \$5 million. The 14% senior convertible debentures:

- accrue interest at the rate of 14%, payable at our option in cash or in shares of our common stock upon conversion of the senior convertible debentures into shares of our common stock or the maturity date;
- mature on April 15, 2002 if not sooner converted into shares of our common stock;
- are partially convertible into shares of our common stock prior to April 14, 2000, at a price of \$5.00 per share, subject to adjustment for stock splits, combinations and similar recapitalizations affecting our common stock, so long as not more than 200,000 shares in total are issued upon such partial conversion;
- are fully convertible into shares of our common stock from and after April 14, 2000, at a price of \$5.00 per share, subject to adjustment for stock splits, combinations and similar recapitalizations affecting our common stock;
- may be prepaid by us at any time after October 15, 2000 at 100% of the principal amount plus all accrued but unpaid interest; and
- are subject to mandatory conversion into shares of our common stock at our option at any time after October 15, 2000 if the average closing bid price of our common stock for ten consecutive trading days equals or exceeds \$10.29.

In connection with this private placement, we agreed to register the shares of our common stock issuable upon the conversion of the senior convertible debentures for resale by certain of the selling stockholders under the Securities Act of 1933 and to use our best efforts to maintain the effectiveness of such registration statement until the earlier of the date that all of the shares of our common stock issuable upon the conversion of the senior convertible debentures have been sold and the date that the number of remaining shares of our common stock issued or issuable upon the conversion may be freely sold pursuant to SEC Rule 144 in any period of three consecutive months.

On June 15, 1999, we completed a private placement of 40,000 shares of convertible preferred stock and warrants to purchase 220,690 shares of our common stock to one of the selling stockholders for aggregate proceeds of \$4 million. The shares of convertible preferred stock issued on that date:

- are convertible into shares of our common stock at a price of \$7.25 per share, subject to adjustment for stock splits, combinations and similar recapitalizations affecting our common stock and to downward adjustment if we issue or agree to issue additional shares of our common stock (excluding options under our option plan and certain other excluded securities) at a price of less than \$7.25 per share to the price at which we issue or agree to issue the

4

lower-priced shares of our common stock or securities convertible or exchangeable for shares of our common stock;

- are redeemable in cash for an amount equal to \$115 per share of convertible preferred stock on the third anniversary of the date of initial issuance if not sooner converted unless we elect in our discretion to extend the redemption date to the fifth anniversary of the date of initial issuance;
- are subject to mandatory conversion into shares of our common stock at



our option at any time after December 15, 1999 if the average closing bid price of our common stock for ten consecutive trading days equals or exceeds \$10.88 per share;

- are not entitled to any voting rights except as otherwise required by applicable law; and
- are not entitled to any dividend rights unless we elect to extend the redemption date to the fifth anniversary of the date of initial issuance, in which case dividends would accrue at the rate of 8% from and after the third anniversary of the date of initial issuance which could be paid in shares of our common stock at our option.

In addition to the shares of convertible preferred stock, on June 15, 1999 we also issued an aggregate of 220,690 warrants to purchase shares of our common stock to one of the selling stockholders. An additional 50,000 warrants were issued to such selling stockholder as compensation for services rendered in connection with the placement of the convertible preferred stock. The warrants issued on that date:

- have a five-year term unless sooner exercised;
- are exercisable for shares of our common stock at a price of \$8.25 per share, subject to adjustment in the same circumstances as the shares of convertible preferred stock described above; and
- are subject to mandatory exercise into shares of our common stock at our option at any time after December 15, 1999 if the average closing bid price of our common stock measured over twenty consecutive trading days equals or exceeds \$16.50.

We also agreed to issue and sell an additional 40,000 shares of convertible preferred stock and warrants to purchase 270,690 shares of our common stock to the same selling stockholder at a second closing. The second closing is subject to the satisfaction of several conditions, including the effectiveness of the registration statement of which this prospectus forms a part. The terms of the convertible preferred stock to be sold at the second closing would be identical to the convertible preferred terms described above except that the conversion price would be equal to the lower of \$7.25 per share or 90% of the average closing bid price of our common stock over the five consecutive trading days ending on the date prior to the second closing date. The terms of the warrants to be sold at the second closing would be identical to the warrant terms described above except that the exercise price would be equal to the lower of \$8.25 per share or 100% of the average closing bid price of our common stock over the five consecutive trading days ending on the date prior to the second closing date. We may elect in our discretion not to proceed with the second closing if the conversion price of the convertible preferred stock to be sold would be less than \$7.25 per share or if the exercise price of the warrants to be sold would be less than \$8.25 per share.

5

In connection with this private placement, we agreed to register the shares of our common stock issuable upon the conversion of the convertible preferred stock and warrants for resale by one of the selling stockholders under the Securities Act of 1933 and to use our best efforts to maintain the effectiveness of such registration statement until the date that all of the shares of our common stock issuable upon the conversion of the convertible preferred stock and warrants have been sold.

Our Company was incorporated in New York in March 1984. Our principal executive offices are located at 5 East 80th Street, New York, New York 10021 and our telephone number at that address is (212) 717-6544.

Risk Factors

Investing in our common stock is very risky. You should be able to bear a complete loss of your investment. You should carefully consider the following factors, in addition to the other information in this prospectus, before investing in our common stock.

#### WE HAVE A LIMITED OPERATING HISTORY

We have a limited operating history and have generated insignificant revenues to date. Although we have recently entered into agreements for the manufacturing and distributing of our ColorMate(Registered) TLc BiliTest(Trademark) System, to date we have not produced or sold substantial quantities of this product. We cannot assure you that this product can be manufactured in commercial quantities or at an acceptable cost or marketed successfully. We also cannot assure you that we will be successful in our efforts to commercialize our ColorMate(Registered) System for other applications.

#### WE EXPECT TO CONTINUE TO OPERATE AT A LOSS AND WE MAY NEVER ACHIEVE PROFITABILITY

We cannot be certain that we will ever achieve and sustain profitability. To date, we have been engaged in research and development activities and have not generated any significant revenues from product sales. As of June 30, 1999, we had an accumulated deficit of \$\_\_\_\_. We expect that we will continue to incur operating losses for the foreseeable future.

In addition, we will record the following charges in connection with the \$5 million debt financing in April 1999 and \$4 million preferred stock financing in June 1999.

- The April financing will result in an additional interest charge of approximately \$3.5 million, resulting from a below-market conversion price of the debt. This amount will be expensed over the twelve-month period ending April 2000.
  
- The June financing will result in a deemed dividend charge of approximately \$3.0 million, resulting from a below-market conversion price of the preferred stock, a redemption premium and warrants issued in connection with the financing. Of this amount, \$1.2 million will be charged in June 1999 and \$1.8 million will be charged over the redemption period.

If we raise the additional \$4 million in preferred stock financing, as noted above, there will be a similar deemed dividend charge.

#### WE MUST SECURE ADDITIONAL FINANCING, OTHERWISE WE WILL NOT BE ABLE TO DEVELOP OUR PRODUCTS

We will require substantial additional funds for our research and product development programs, for our obligations to our manufacturing and distribution partners, for operating expenses, to pursue regulatory approvals and to develop and commercialize other applications of our ColorMate(Registered) System. Adequate funds for these purposes, whether through the financial markets or other sources, may not be available when needed. If our funds are insufficient, we may be unable to meet our obligations under manufacturing agreements and the distribution agreements relating to our ColorMate(Registered) System and our ColorMate(Registered) TLc BiliTest(Trademark) System or under other agreements we may enter into in the future. If we fail to make any payment required to be made or if we are otherwise in default under these

agreements relating to our ColorMate(Registered) System and our ColorMate(Registered) TLC BiliTest(Trademark) System, the other parties will have the right to terminate the agreements. Termination of any of these agreements would have a material adverse effect on our business by rendering us unable to manufacture and distribute our ColorMate(Registered) System and our ColorMate(Registered) TLC BiliTest(Trademark) System until replacement agreements were entered into.

WE MAY NEED TO RAISE SUBSTANTIAL ADDITIONAL FUNDS IF THE CONVERTIBLE DEBENTURES AND CONVERTIBLE PREFERRED STOCK ISSUED TO THE SELLING STOCKHOLDERS ARE NOT CONVERTED INTO SHARES OF OUR COMMON STOCK PRIOR TO MATURITY

If the selling stockholders do not elect to convert the senior convertible debentures or the convertible preferred stock we issued to them into shares of our common stock and we are unable to compel such conversion pursuant to the mandatory conversion provisions described above relating to the market price of our common stock we will be obligated to repay such selling stockholders in cash on the maturity date of the convertible debentures and the redemption date of the convertible preferred stock. In addition, if an event of default occurs with respect to the convertible debentures prior to the stated maturity date the selling stockholders may elect to accelerate the maturity of the convertible debentures with the effect that the principal amount and all accrued but unpaid interest would become immediately due and payable. We cannot assure you that we would have sufficient funds available to us to satisfy such obligations. Failure to satisfy such obligations would have a material adverse effect on our business and could force us to close operations and seek protection from our creditors under applicable bankruptcy laws.

WE HAVE LIMITED MARKETING AND SALES EXPERIENCE

We have not previously licensed our intellectual property for use in any industry other than the beauty aid, hosiery and cosmetics industries and our management has not had any experience in marketing our intellectual property, ColorMate(Registered) System or our other products in any other field. Prior to licensing our intellectual property in any industry, including the cosmetic, beauty aids and fashion industries, we will be required to develop additional marketing skills relevant to such industries and conduct significant further marketing activities. In addition, in certain of these industries we will also have to overcome regulatory hurdles and professional skepticism and develop practical applications. Our medical support and sales division was only recently established and we cannot assure you that it will successfully generate commercial levels of sales, that we will be able to successfully maintain a marketing and sales force or that we will be able to enter into additional marketing and sales agreements with third parties on acceptable terms.

WE DEPEND ON OTHER PARTIES FOR MANUFACTURING AND MARKETING AND WE DO NOT HAVE MANUFACTURING OR MARKETING CAPABILITIES OF OUR OWN

Our strategy for the research, development and commercialization of our products involves entering into various arrangements with corporate partners and is dependent upon the subsequent success of these outside parties in performing their responsibilities. We rely on our corporate partners to manufacture and to market our ColorMate(Registered) TLC BiliTest(Trademark) System and will continue to rely on corporate partners to manufacture and to market our ColorMate(Registered) System for other applications. The amount and timing of resources to be devoted to these activities by these other parties may not be within our control. We cannot assure you that these parties will perform their obligations as expected or that we will derive any revenue from these

arrangements. We have no experience in manufacturing or marketing any products. We currently do not have the resources to manufacture or market independently on a commercial scale the ColorMate(Registered) System, the ColorMate(Registered) TLc BiliTest(Trademark) System or any other products that we may develop. The failure of our corporate partners to perform their obligations relating to the manufacturing and distributing of our ColorMate(Registered) System or ColorMate(Registered) TLc BiliTest(Trademark) System would have a material adverse effect on our business by rendering us unable to manufacture and distribute our ColorMate(Registered) System and our ColorMate(Registered) TLc BiliTest(Trademark) System until a replacement arrangement was entered into.

WE MAY NOT BE ABLE TO COMMERCIALIZE OUR COLORMATE(REGISTERED) SYSTEM OR OUR COLORMATE(REGISTERED) TLC BILITEST(TRADEMARK) SYSTEM SUCCESSFULLY

Our success in commercializing our ColorMate(Registered) System depends on many factors. In the case of our ColorMate(Registered) TLc BiliTest(Trademark) System, our success is dependent upon acceptance by healthcare professionals and patients. Their acceptance of our ColorMate(Registered) TLc BiliTest(Trademark) System will largely depend on our ability to show them its ability to compete with the heelstick method for monitoring infant jaundice as well as other non-invasive methods that may be developed by others with respect to:

- safety;
- effectiveness;
- ease of use; and
- price.

We cannot assure you that our ColorMate(Registered) TLc BiliTest(Trademark) System will be competitive with respect to these factors or that our distribution partner will be able to successfully market it in a timely and effective manner. We also cannot assure you that our ColorMate(Registered) System will be competitive in other applications with existing or future products or that our future distribution partners will be able to successfully market our ColorMate(Registered) System in those other applications in a timely

7

and effective manner. Our success in commercializing our ColorMate(Registered) TLc BiliTest(Trademark) System in other applications is dependent upon demonstrating its utility for those applications in relation to competing products and establishing a competitive pricing strategy in relation to such competing products.

WE ARE IN THE EARLY STAGE OF DEVELOPMENT OF OTHER POTENTIAL MEDICAL APPLICATIONS.

Although we have received FDA clearance to commercially market our ColorMate(Registered) TLc BiliTest(Trademark) System for monitoring infant jaundice, our clinical and research development programs for other medical applications of our ColorMate(Registered) System are at a very preliminary stage and substantial additional research and development and further clinical trials will be necessary before commercial versions of any additional proposed products are submitted for FDA marketing clearance or approval and produced for such other medical applications. We cannot assure you that we will be able to successfully address the problems that may arise during the development, FDA review process and commercialization of these other medical applications or that any of our proposed products for these other medical applications will be successfully developed, proven safe and effective in clinical trials, cleared or approved by the FDA for marketing or meet applicable regulatory standards and requirements.

WE HAVE NOT YET SUCCESSFULLY COMMERCIALIZED OUR COLORMATE(REGISTERED) SYSTEM FOR NON-MEDICAL APPLICATIONS.

To date, we have not achieved commercial market penetration in any non-medical industry. Based on the deminimus cosmetics sales levels per location that we have achieved from the placement of ColorMate(Registered) System units to date, we believe that we would have to significantly increase the number of ColorMate(Registered) System unit installations in order to achieve significant levels of cosmetics sales revenues and that obtaining such increased cosmetic sales revenues will take significantly longer to achieve than was originally anticipated. In order to commercialize our ColorMate(Registered) System in connection with non-medical applications we will need to develop additional marketing skills, incur significant expenses on sales and marketing activities, hire additional employees and consultants and enter into arrangements with third party distributors. We cannot assure you that we will be successful in our efforts to commercialize any of these non-medical applications of our ColorMate(Registered) System.

WE ARE SUBJECT TO EXTENSIVE GOVERNMENT REGULATION

The FDA and comparable foreign regulatory authorities generally require rigorous pre-clinical testing, clinical trials and government premarket review and clearance approval for the type of human medical devices we market. We also are or may be regulated at the state and local level. Numerous regulations govern, among other things, the manufacturing, safety, labeling, promotion, storage, record keeping, reporting and marketing of medical devices. Governmental regulation may significantly delay the marketing of our products, prevent marketing of products altogether or impose costly requirements on our activities. A delay in obtaining or failure to obtain or maintain regulatory clearances or approvals for any of our products will have an adverse effect on our business. We cannot predict the adverse effects that existing or future government regulations may have on our business.

Even though our ColorMate(Registered) TLc BiliTest(Trademark) System received FDA marketing clearance for monitoring infant jaundice, we may still face difficulties in manufacturing and marketing this product. A marketed product, its manufacturer and the manufacturer's facilities are subject to regulatory review and periodic establishment inspections. The discovery of previously unknown problems with a product, manufacturer or facility may result in restrictions on the product or manufacturer, including withdrawal of the product from the market. The failure to comply with applicable regulatory requirements can, among other things, result in:

8

- fines;
- suspended or withdrawn regulatory approvals;
- refusal to clear or approve pending applications;
- refusal to permit exports or to allow imports from the United States;
- product recalls;
- seizure of products;
- injunctions;
- operating restrictions; and
- criminal prosecutions.

WE MAY BE UNABLE TO SUCCESSFULLY DEVELOP POTENTIAL INTERNATIONAL MARKETS AND OBTAIN FOREIGN REGULATORY APPROVALS.

We believe that sales of our products to customers outside of the United States represent a significant potential source of growth. We may not be able to obtain agreements with third party distributors for marketing outside the United States.

Additionally, to market our ColorMate(Registered) Tlc BiliTest(Trademark) System in the European Union we applied for ISO-9001/EN46001 certification and the right to affix the CE mark. ISO-9001/EN46001 certification recognizes that we have established a quality system for the design, development, manufacturing, servicing and distribution of the ColorMate(Registered) Tlc BiliTest(Trademark) System. The CE mark is a symbol of quality and compliance with applicable European Union medical device directives. We have received both the ISO-9001/EN46001 certification and the right to affix the CE mark to our ColorMate(Registered) Tlc BiliTest(Trademark) System. We cannot assure you that we will be able to maintain these important qualifications. The loss of either of these qualifications would have a material adverse effect on our plans for European distribution of our products.

We cannot be certain that we will obtain any further regulatory approvals in other countries. In order to market our products outside of the United States, we also must comply with numerous and varying foreign regulatory requirements implemented by foreign authorities. The approval procedure varies among countries and can involve additional testing. The time required to obtain further clearances or approvals may differ from that required to obtain FDA clearances or approvals for commercial marketing. The foreign regulatory approval process includes all of the risks associated with obtaining FDA clearances or approvals set forth above, and clearance or approval by the FDA does not ensure clearance or approval by the authorities of any other country.

#### ACCEPTANCE BY THE MEDICAL COMMUNITY IS ESSENTIAL TO OUR FUTURE SUCCESS

The commercial acceptance of our ColorMate(Registered) Tlc BiliTest(Trademark) System is substantially dependent on its acceptance by the medical community. We cannot assure you that the medical community will accept the ColorMate(Registered) Tlc BiliTest(Trademark) System or, if acceptable, as to the length of time it would take to gain acceptance. Because the medical community is relatively slow to adopt new technologies we cannot assure you that the medical community will perceive a need for, or accept, our ColorMate(Registered) Tlc BiliTest(Trademark) System, or be willing to commit funds to its purchase and use. Widespread acceptance of the ColorMate(Registered) Tlc BiliTest(Trademark) System as a useful method for monitoring infant jaundice will require educating the medical community about its advantages, reliability and utility. In addition, acceptance of the ColorMate(Registered) Tlc BiliTest(Trademark) System may be adversely affected by competing products which may have more utility or be received in a better way than our

ColorMate(Registered) Tlc BiliTest(Trademark) System.

#### OUR MAIN COMPETITORS GENERALLY HAVE MORE RESOURCES THAN WE HAVE

The medical device industry is characterized by rapid technological advances, evolving industry standards and technological obsolescence. Our inability to meet or surpass our competitors' technological advances in this industry could have a material adverse effect on our business. We have several competitors in this industry, none of whom we believe to be dominant, but who have financial, marketing and other resources substantially greater than ours (including companies such as Minolta Co., Ltd., Respironics, Inc., which recently acquired

Healthdyne Technology, Inc. and SpectRx, among others), and some of which have greater name recognition and lengthier operating histories in the industry. We believe that the only commercially available non-invasive bilirubinometers with FDA marketing clearance in the United States are the Minolta Jaundice Meter and the SpectRx Bilicheck.

In addition, there will be other companies with which we will compete regarding other potential medical applications which we may pursue. Furthermore, the monitoring methods currently in use for monitoring infant jaundice as well as dermatological diseases, the principal diseases with respect to which we may seek regulatory marketing clearance, have already achieved acceptance by and are in widespread use in the medical community, unlike our proposed methods. Our competitors in this industry and others may develop products which may render our ColorMate(Registered) TLC BiliTest(Trademark) System obsolete or which have advantages over our ColorMate(Registered) TLC BiliTest(Trademark) System, such as greater accuracy and precision or greater acceptance by the medical community.

To the extent that we are able to commercialize our ColorMate(Registered) System for non-medical applications such as dentistry we will also encounter competition. In particular, the cosmetics industry and the fashion industry are particularly sensitive to changing consumer preferences and demands, which are difficult to predict and beyond our control. Competition in the cosmetics and dental industries is diverse, but is nevertheless dominated by a number of large, established, well-known companies having significantly greater financial, marketing and human resources than we do. These competitors also have an established presence in the market and manufacturing capabilities. We cannot assure you that we will be able to compete successfully in these non-medical markets.

#### WE DO NOT INTEND TO DECLARE DIVIDENDS IN THE FORESEEABLE FUTURE

Our Board of Directors does not intend to declare any dividends in the foreseeable future, but intends to retain all earnings, if any, for use in our business operations. We have 1,380,000 shares of Class A preferred stock which are entitled to receive annual non-cumulative dividends of \$.001 per share, when and as declared by our Board of Directors, which must be paid before any cash dividend may be paid with respect to our common stock.

#### OUR BOARD OF DIRECTORS IS AUTHORIZED TO ISSUE PREFERRED STOCK WITHOUT STOCKHOLDER AUTHORIZATION. PREFERRED STOCK COULD BE USED AS AN ANTI-TAKEOVER DEVICE.

Our Board of Directors is authorized to issue from time to time without stockholder authorization shares of preferred stock. The issuance of preferred stock could decrease the amount of assets and earnings available for distribution to our other stockholders. Preferred stockholders could receive voting rights and rights to payments on liquidation or of dividends or other rights which are greater than the rights of the holders of our common stock. In addition, the issuance of preferred stock may make it more difficult for a third party to acquire, or may discourage a third party from acquiring, voting control of our stock. This provision could also discourage an unsolicited acquisition and could make it less likely that stockholders receive a premium for their shares as a result of any such attempt.

10

#### OUR DIRECTORS AND EXECUTIVE OFFICERS OWN A SIGNIFICANT AMOUNT OF STOCK OF CCSI AND EXERT CONSIDERABLE CONTROL OVER CCSI

As of June 30, 1999, our directors and executive officers beneficially owned approximately 19% of our outstanding common stock. As a result, these stockholders are able to significantly influence all matters requiring stockholder approval, including the election of directors and the approval of significant corporate transactions. This concentration of ownership could also delay or prevent a change in control that may be favored by other stockholders.

#### WE WILL NEED TO HIRE ADDITIONAL PERSONNEL

In order to generate and service sales of our medical products, we will need to attract and retain significant additional senior and midlevel personnel experienced in financial, administrative, marketing, sales and regulatory matters in the medical industry. We currently only have -- full-time employees, of which -- are medical marketing or regulatory personnel. Our success will depend in part on our ability to hire, train and retain new and existing personnel. Competition for qualified personnel is intense and we cannot assure you that we will be successful in hiring, training or retaining additional personnel to support our executive, operations, marketing, sales, research and product development needs and efforts.

#### WE DEPEND ON THE SERVICES OF KEY PERSONNEL

Our success depends to a significant extent upon the efforts of Darby Simpson Macfarlane, the Chairperson of our Board of Directors, our Chief Executive Officer and one of our major stockholders and David Kenneth Macfarlane, our Vice President, Research and Development. Although we have purchased key-man life insurance policies in the amounts of \$1,000,000 on the lives of each of Ms. and Mr. Macfarlane, we cannot assure you that the proceeds from such policies would enable us to retain suitable replacements for them. The loss of the services of either Ms. Macfarlane or Mr. Macfarlane could adversely affect our business.

#### WE ARE A DEFENDANT IN PENDING SECURITIES LITIGATION

We have been named, together with certain of our officers and directors, as a defendant in three pending legal actions involving allegations that we made false and misleading statements during the period from July 30, 1997 through June 8, 1998 regarding:

- the new innovative nature of our ColorMate(Registered) TLc BiliTest(Trademark) System;
- the market size and revenue potential of our ColorMate(Registered) TLc BiliTest(Trademark) System; and
- the existence and status of negotiations with potential distributors of our ColorMate(Registered) TLc BiliTest(Trademark) System.

Although we believe that the claims asserted in these suits are without merit and intend to contest them vigorously, we expect to incur substantial legal expenses in connection with defending these actions and cannot assure you that the outcome of this litigation will not have a material adverse effect on our business.

#### WE FACE THE RISK OF PRODUCT LIABILITY OR MALPRACTICE CLAIMS WHICH MAY EXCEED THE SCOPE OR AMOUNT OF OUR INSURANCE COVERAGE

The manufacture and sale of human medical devices entail significant risk of product liability and malpractice claims. We cannot assure you that our product liability coverage will be adequate to protect us from any liabilities we might incur in connection with the use or sale of our products. In addition, we may require increased product liability coverage as additional products are commercialized. Such insurance is expensive and in the future may not be available on acceptable terms, if at all. A successful product liability claim or series of claims brought against us in excess

of our insurance coverage could have a material adverse effect on our business and results of operations. We must indemnify our distribution partner against any product liability claims brought against it arising out of products developed by us. We do not have any malpractice insurance.



OUR SUCCESS IS DEPENDENT UPON OUR ABILITY TO EFFECTIVELY PROTECT OUR PATENTS AND PROPRIETARY RIGHTS, WHICH WE MAY NOT BE ABLE TO DO

Our success will depend to a significant degree on our ability to obtain patents and licenses to patent rights, preserve trade secrets and to operate without infringing on the proprietary rights of others. If we are not successful in these endeavors, our business will be substantially impaired.

To date, we have obtained several patents in the United States (U.S. Patent Nos. 4,909,632, 5,311,293, 5,313,267 and 5,671,735) and other countries and have filed a number of pending patent applications in the United States and other countries relating to our technologies. We cannot assure you that our existing patents will not be successfully challenged or circumvented, that we will otherwise be able to rely on such patents, that such patents will be sufficient to protect our technologies or that future patents will issue from our pending patent applications or that any patent will issue on technology arising from additional research or, if patents do issue, that claims allowed will be sufficient to protect our technologies.

We cannot assure you that our competitors will not seek to apply for and obtain patents that prevent, limit or interfere with our ability to make, use and sell our products either in the United States or in foreign countries. If our ability to make, use and sell our products were to be limited or prohibited it could have a material adverse effect on our business. We also cannot assure you that we will not become subject to patent infringement claims brought by third parties or to re-examination of previously issued patents or interference proceedings to determine the priority of inventions. Any litigation or interference proceedings brought against us, initiated by us or otherwise involving us may result in our incurring substantial legal fees and expenses and may require substantial time commitments by some of our employees. Any adverse determination in any such litigation or proceeding could have a material adverse effect on our business.

The patent application process may take several years and may entail considerable expense. The failure to obtain patent protection on the technologies underlying our products may have a material adverse effect on our competitive position and business prospects. If patents can be obtained, we cannot assure you that any such patents will provide us with any competitive advantage. For example, others may independently develop similar but non-infringing technologies and patents may be invalidated in litigation.

We also rely on a combination of trade secret and copyright law, employee and third-party nondisclosure agreements and other protective measures to protect intellectual property rights pertaining to our products and technologies. We cannot be certain that these measures will provide meaningful protection of our trade secrets, know-how or other proprietary information in the event of any unauthorized use, misappropriation or disclosure of such trade secrets, know-how or other proprietary information. In addition, the laws of certain foreign countries may not protect our intellectual property rights to the same extent as do the laws of the United States. We cannot assure you that we will be able to protect our intellectual property successfully.

OUR ASSUMPTIONS REGARDING THE BUSINESS PLAN AND STRATEGY FOR OUR COLORMATE (REGISTERED) TLC BILITEST (TRADEMARK) SYSTEM MAY PROVE TO BE INACCURATE

Our business plan and strategy for the commercialization of our ColorMate (Registered) TLC Bilitest (Trademark) System is based upon certain assumptions we have made regarding the size of the bilirubin monitoring market, our anticipated short-term and eventual share of this market, the price at which we believe

we will be able to sell or lease our ColorMate (Registered) TLC

Bilitest (Trademark) System and consumer acceptance of this product. We cannot assure you that these assumptions will prove to be correct.

THERE ARE RISKS RELATED TO SECURITIES LISTED ON THE NASDAQ SMALLCAP MARKET AND LOW-PRICED SECURITIES

Our common stock is presently traded on the Nasdaq SmallCap Market. Although we intend to apply for the listing of our common stock on the NASDAQ National Market System, we cannot assure you that such listing application will be accepted or, if it is accepted, that we will continue to meet the requirements for continued listing on the NASDAQ National Market System.

Generally, continued inclusion on the Nasdaq SmallCap Market requires that our common stock be registered under Section 12(g) of the Securities Exchange Act of 1934 and that:

- we maintain at least \$2,000,000 in net tangible assets, a \$35,000,000 market capitalization or net income of at least \$500,000 in two of the three prior years;
- we have at least 500,000 shares in the public float valued at \$1,000,000 or more;
- our common stock has a minimum bid price of \$1.00;
- we have at least two active market makers; and
- we have at least 300 holders of our common stock.

We cannot guarantee that we will be able to maintain these requirements in the future. If we fail to meet the Nasdaq SmallCap Market listing requirements, the market value of our common stock could fall and holders of common stock would likely find it more difficult to dispose of and to obtain accurate quotations as to the market value of the common stock.

If our common stock ceases to be included on the Nasdaq SmallCap Market, it could become subject to rules adopted by the SEC regulating broker-dealer practices in connection with transactions in "penny stocks." Penny stocks generally are equity securities with a price per share of less than \$5.00 (other than securities registered on certain national securities exchanges or quoted on the Nasdaq Stock Market, provided that current price and volume information with respect to transactions in these securities is provided). The penny stock rules require a broker-dealer, prior to a transaction in a penny stock not otherwise exempt from the rules, to deliver a standardized risk disclosure document in a form prepared by the SEC which provides information about penny stocks and the nature and level of risks in the penny stock market. The broker-dealer also must provide the customer with current bid and offer quotations for the penny stock, the compensation of the broker-dealer and its sales person in the transaction and monthly account statements showing the market value of each penny stock held in the customer's account. The bid and offer quotations, and the broker-dealer and salesperson compensation information, must be given to the customer orally or in writing prior to effecting the transaction and must be given to the customer in writing before or with the customer's confirmation. In addition, the penny stock rules require that prior to a transaction in a penny stock not otherwise exempt from these rules, the broker-dealer must make a special written determination that the penny stock is a suitable investment for the purchaser and receive the purchaser's written agreement to the transaction. These

13

disclosure requirements may have the effect of reducing the level of trading activity in the secondary market for a stock that becomes subject to these penny stock rules. If our common stock becomes subject to the penny stock rules, you may be unable to readily sell shares of our common stock.

OUR STOCK PRICE MAY BE VOLATILE

The market prices for securities of many companies in the medical device industry, including ours, have historically been highly volatile, and the market from time to time has experienced significant price and volume fluctuations unrelated to the operating performance of particular companies. Prices for our common stock may be influenced by many factors, including:

- investor perception of us;
- analyst recommendations;
- fluctuations in our operating results;
- market conditions relating to the medical device industry;
- announcements of technological innovations or new commercial products by us or our competitors;
- publicity regarding actual or potential developments relating to products under development by us or our competitors;
- developments or disputes concerning patent or proprietary rights;
- delays in the development or approval of our product candidates;
- regulatory developments in both the United States and foreign countries;
- public concern as to the safety of medical device technologies;
- period-to-period fluctuations in financial results;
- future sales of substantial amounts of common stock by existing shareholders; or
- economic and other external factors.

There is limited trading volume in our common stock and limited liquidity. We cannot assure you that greater trading volume or a more active market for our common stock will develop.

14

#### CONVERSION OF THE CONVERTIBLE DEBENTURES AND THE CONVERTIBLE PREFERRED STOCK AND EXERCISE OF THE RELATED WARRANTS WILL DILUTE THE INTERESTS OF EXISTING STOCKHOLDERS

The conversion price of the convertible debentures and the convertible preferred stock issued to the selling stockholders and the exercise price of the related warrants issued to one of the selling stockholders is expected to be less than the current market price of our common stock on the date of conversion or exercise. So long as such securities remain outstanding and unconverted or unexercised, the terms under which we could obtain additional equity financing may be adversely affected. To the extent of any conversion or exercise of such securities, the interests of our existing stockholders will be diluted proportionately.

#### THERE ARE RISKS ASSOCIATED WITH HEALTHCARE REFORM AND THIRD-PARTY REIMBURSEMENT

Political, economic and regulatory influences are subjecting the healthcare industry in the United States to fundamental change. Recent initiatives to reduce the federal deficit and to reform healthcare delivery are increasing cost-containment efforts. We anticipate that Congress, state legislatures and the private sector will continue to review and assess alternative benefits, controls on healthcare spending through limitations on the growth of private health insurance premiums and Medicare and Medicaid spending, the creation of large insurance purchasing groups, price controls on pharmaceuticals and medical devices and other fundamental changes to the healthcare delivery

system. Any such changes could negatively impact our ultimate profitability. Legislative debate is expected to continue in the future, and market forces are expected to drive reductions of healthcare costs. We cannot predict what impact the adoption of any federal or state healthcare reform measures or future private sector reforms may have on our business.

Our ability to successfully commercialize our ColorMate(Registered) TLC BiliTest(Trademark) System and our other medical product candidates will depend in part on the extent to which appropriate reimbursement codes and authorized cost reimbursement levels of such products and related treatment are obtained from governmental authorities, private health insurers and other organizations, such as health maintenance organizations.

Third-party payers are increasingly challenging the prices charged for medical products and services. Also, the trend toward managed healthcare in the United States and the concurrent growth of organizations such as healthcare management organizations, which could control or significantly influence the purchase of healthcare services and products, as well as legislative proposals to reform healthcare or reduce government insurance programs, may all result in lower prices for our medical product candidates than we currently expect. The cost containment measures that healthcare payers and providers are instituting and the effect of any healthcare reform could negatively affect our ability to operate profitably.

American Medical Association CPT codes are generally used to facilitate the processing of insurance reimbursement claims and to provide a simplified reporting procedure. However, assignment of a code does not assure that the insurer will provide reimbursement or that the AMA endorses the medical procedure at issue. In March 1998, we were assigned AMA CPT Code 82250 for processing claims for use of the ColorMate(Registered) TLC BiliTest(Trademark) System. The same code for processing claims for use of our ColorMate(Registered) TLC BiliTest(Trademark) is assigned for the reimbursement of laboratory blood tests currently used to monitor infant jaundice. Subsequently, the AMA informed us that CPT Code 84999 ("Unlisted Chemistry Procedure"), not code 82250, was the assigned code. However, the AMA indicated that it was reviewing coding in this area generally. Although we believe that the original code assignment to our ColorMate(Registered) TLC BiliTest(Trademark) System was correct, we cannot assure you that our belief will be sustained. Claims for reimbursement under CPT code 84999 may not be as readily processed for reimbursement as claims made under CPT code 82250.

#### YEAR 2000 ISSUE RISKS MAY RESULT IN A MATERIAL ADVERSE EFFECT ON OUR BUSINESS

We are aware of the issues associated with the programming code in existing computer systems as the year 2000 approaches. The year 2000 problem is pervasive and complex. Virtually every computer operation will be affected in some way by the rollover of the two digit year value to "00".

15

The issue is whether computer systems will properly recognize date-sensitive information when the year changes to 2000. Systems that do not properly recognize such information could generate erroneous data or cause a system to fail. Although we do not presently believe that, with upgrades of existing software and/or conversion to new software, the year 2000 problem will pose significant operational problems for our internal computer systems or have a negative affect on our financial position or results of operations, we cannot assure you that any year 2000 compliance problems of our suppliers and distribution partner will not negatively affect our financial position or results of operations. Because uncertainty exists concerning the potential costs and effects associated with any year 2000 compliance, we intend to continue to make efforts to ensure that third parties with whom we have relationships are year 2000 compliant. We have not incurred significant costs to date associated with year 2000 compliance and presently believe estimated future costs will not be material. However, actual results could differ materially from our expectations due to unanticipated technological difficulties or project delays. If we or any third parties upon which we rely are unable to address the year

2000 issue in a timely manner, it could have a materially adverse effect on our financial position and results of operations. In order to assure that this does not occur, we are in the process of developing a contingency plan and intend to devote all resources required to attempt to resolve any significant year 2000 issues in a timely manner.

WE EXPECT TO ISSUE ADDITIONAL SHARES IN THE FUTURE WHICH WOULD DILUTE THE OUTSTANDING SHARES

In order to finance the commercialization of our ColorMate(Registered) TLC Bilitest(Trademark) System and other applications of our ColorMate(Registered) System, we expect to issue and sell additional shares of our common stock or securities convertible into our common stock, such as the securities which we issued to the selling stockholders, in the future. The prices at which we sell these securities and the other terms and provisions related to such securities will depend on prevailing market conditions and other factors in effect at that time, all of which are beyond our control. Such shares may be issued at prices which are less than the then-current market price of our common stock and/or at prices which are less than the prices at which the shares of common stock being offered by the selling stockholders hereby are sold. Sales of substantial amounts of our common stock in the public market could adversely affect the market price of our common stock.

16

#### Where You Can Get More Information

We are a reporting company and file annual, quarterly and current reports, proxy statements and other information with the SEC. You may read and copy these reports, proxy statements and other information at the SEC's public reference rooms in Washington, DC, New York, NY and Chicago, IL. You can request copies of these documents by writing to the SEC and paying a fee for the copying cost. Please call the SEC at 1-800-SEC-0330 for more information about the operation of the public reference rooms. Our SEC filings are also available at the SEC's web site at "<http://www.sec.gov>." In addition, you can read and copy our SEC filings at the office of the National Association of Securities Dealers, Inc. at 1735 K Street, N.W., Washington, DC 20006.

The SEC allows us to "incorporate by reference" information that we file with it, which means that we can disclose important information to you by referring you to those documents. The information incorporated by reference is an important part of this prospectus, and information that we file later with the SEC will automatically update and supersede this information. We incorporate by reference the documents listed below and any future filings we will make with the SEC under Section 13(a), 13(c), 14 or 15(d) of the Securities Exchange Act of 1934:

- Annual Report on Form 10-K for the year ended December 31, 1998, as amended by Form 10-K/A filed April 29, 1999;
- Current Report on Form 8-K filed April 30, 1999;
- Quarterly Report on Form 10-Q for the three months ended March 31, 1999 filed May 17, 1999;
- Current Report on Form 8-K filed June 18, 1999;
- Current Report on Form 8-K filed June 30, 1999; and
- The description of the common stock contained in Chromatics Color Sciences International, Inc. Registration Statement on Form 8-A, as filed on February 1, 1993 with the SEC under the Securities Exchange Act of 1934.

You may request a copy of these filings at no cost, by writing or telephoning us at the following address:

#### Use of Proceeds

We will not receive any proceeds resulting from the sale of the shares of common stock by the selling stockholders, but we will receive the proceeds from the exercise of the warrants.

17

#### Forward-Looking Statements

This prospectus contains forward-looking statements within the meaning of Section 27A of the Securities Act of 1933 and Section 21E of the Securities Exchange Act of 1934, and information about our financial condition, results of operations and business that are based on our current and future expectations. The words "believe," "anticipate," "expect," "intend," and words of similar import are intended to identify these statements as forward-looking statements. Such forward-looking statements include the following:

- our belief that our existing capital resources will be adequate to fund our needs for at least the next 12 months;
- our belief that our ColorMate(Registered) System and/or our ColorMate(Registered) TLC BiliTest(Trademark) System can be marketed in the medical, dental, biological, cosmetic, industrial, soil contamination, hair color, beauty-aid or fashion industries;
- our belief that the size of the infant jaundice monitoring market in the United States is approximately 15,000,000 tests annually and approximately the same size in Europe and in Asia, South America and Australia combined and that non-invasive monitoring could potentially increase the amount of annual tests performed;
- our belief that our ColorMate(Registered) TLC BiliTest(Trademark) System is a significant improvement in patient care regarding infant jaundice;
- our belief that our ColorMate(Registered) TLC BiliTest(Trademark) System can be successfully commercialized for other applications;
- our belief that we will be successful in attracting and retaining additional qualified personnel;
- our belief that the medical community will accept our ColorMate(Registered) TLC BiliTest(Trademark) System;
- our belief that we can successfully mass manufacture our ColorMate(Registered) TLC BiliTest(Trademark) System and our ColorMate(Registered) System;
- our belief that we can successfully generate revenues from the commercialization of our intellectual property;
- our belief that we can successfully license our ColorMate(Registered) TLC BiliTest(Trademark) System for the parents market or expand our sales into this market through our own medical division; and
- our belief that our distribution partner, Datex-Ohmeda, Inc., will be successful in penetrating its targeted markets within

the projected time periods.

Forward-looking statements necessarily involve risks and uncertainties, and our actual results could differ materially from those anticipated in the forward-looking statements, including those set forth under "Risk Factors" and elsewhere in this prospectus. We caution you that no forward-looking statement is a guarantee of future performance. You should not place undue reliance on these forward-looking statements, which speak only of the date of this prospectus. We do not undertake any obligation to publicly release any revisions to these forward-looking statements to reflect events or circumstances after the date of this prospectus or to reflect the occurrence of unanticipated events which may cause our actual results to differ from those expressed or implied by the forward-looking statements contained in this prospectus. The factors set forth under "Risk Factors" and other cautionary statements made in this prospectus should be read and understood as being applicable to all related forward-looking statements wherever they appear in this prospectus.

#### Selling Stockholders

In private placements concluding in April 1999 and June 1999 we sold to the selling stockholders convertible debt securities, convertible preferred stock and warrants to purchase common stock, and agreed to register the shares of common stock issuable upon the conversion of these convertible debt securities and convertible preferred stock and the exercise of warrants sold to those selling stockholders for resale of such securities by the selling stockholders. We also agreed to use our best efforts to keep the registration statement effective for \_\_\_\_\_, or until all of the shares are sold under the registration statement, whichever comes first. Our registration of the shares of common stock does not necessarily mean that the selling stockholders will sell all or any of the shares.

18

The following table sets forth certain information regarding the beneficial ownership of the common stock, as of June 30, 1999, of each of the selling stockholders. The information provided in the table below with respect to each selling stockholder has been obtained from such selling stockholder. Except as otherwise disclosed below, none of the selling stockholders has, or within the past three years has had, any position, office or other material relationship with us. Because the selling stockholders may sell all or some portion of the shares of common stock beneficially owned by them, we cannot estimate the number of shares of common stock that will be beneficially owned by the selling stockholders after this offering. In addition, the selling stockholders may have sold, transferred or otherwise disposed of, or may sell, transfer or otherwise dispose of, at any time or from time to time since the date on which they provided the information regarding the shares of common stock beneficially owned by them, all or a portion of the shares of common stock beneficially owned by them in transactions exempt from the registration requirements of the Securities Act of 1933. The following table assumes that all of the shares of common stock being registered will be sold by the selling stockholders.

Beneficial ownership is determined in accordance with Rule 13d-3(d) promulgated by the SEC under the Securities Exchange Act of 1934, as amended. Shares of common stock issuable pursuant to options, warrants and convertible securities, to the extent such securities are currently exercisable or convertible within 60 days of June 30, 1999, are treated as outstanding for computing the percentage of the person holding such securities but are not treated as outstanding for computing the percentage of any other person. Unless otherwise noted, each person identified possesses sole voting and investment power with respect to the shares, subject to community property laws where applicable. Shares not outstanding but deemed beneficially owned by virtue of the right of a person or group to acquire them within 60 days are treated as outstanding only for purposes of determining the number of and percent owned by such person or group. Applicable percentages are based on 15,423,442 shares outstanding on June 30, 1999 adjusted as required by rules promulgated by the SEC.

<TABLE>

<CAPTION>

Name of Selling Stockholder	Number of Shares Beneficially Owned	Number of Shares Registered for Sale Hereunder	Number of Shares Beneficially Owned After Offering
<S>	<C>	<C>	<C>
LBI Group Inc. 3 World Financial Center New York, New York 10285	822,414 (1)	1,821,380 (2)	0
Bradley James Schreiner Trust c/o P.O. Box 400 Sterling, IL 61081	40,000 (3)	284,000 (4)	0
Gregory William Schreiner Trust c/o P.O. Box 400 Sterling, IL 61081	40,000 (3)	284,000 (4)	0
Steven Michael Schreiner Trust c/o P.O. Box 400 Sterling, IL 61081	40,000 (3)	284,000 (4)	0
L.B.P. Trust c/o P.O. Box 400 Sterling, IL 61081	40,000 (3)	284,000 (4)	0
Gary W. Schreiner Trust c/o P.O. Box 400 Sterling, IL 61081	40,000 (3)	284,000 (4)	0
G.A.P. Trust c/o P.O. Box 400 Sterling, IL 61081	40,000 (3)	284,000 (4)	0

</TABLE>

(1) Represents shares of common stock which may be acquired within 60 days of June 30, 1999 upon the conversion of the convertible preferred stock held by such selling stockholder and the exercise of the warrants issued to such selling stockholder. Does not include up to an additional 551,724 shares of common stock which may be acquired upon the conversion of \$4 million of convertible preferred stock that may be acquired by such selling stockholder at a subsequent closing, subject to certain conditions. Does not include up to an additional 88,276 shares of common stock which may be acquired by such selling stockholder upon the conversion of the dividends that may accrue on the shares of convertible preferred stock held by such selling stockholder during the period from the June 15, 2002 through June 15, 2004. Does not include up to an additional 88,276 shares of common stock which may be acquired by such selling stockholder upon the conversion of the dividends that may accrue on the shares of convertible preferred stock that may be acquired by such selling stockholder at a subsequent closing, subject to certain conditions, during the period from the June 15, 2002 through June 15, 2004. Does not include up to an additional 270,690 shares of common stock which may be acquired upon exercise of additional warrants that may be issued to such selling stockholder in connection with the issuance and sale of the additional \$4 million of convertible preferred stock that may be acquired by such selling stockholder at a subsequent closing, subject to certain conditions. Mr. Frederick Frank, Vice Chairman of Lehman Brothers, an investment banking firm, has been an advisor to us since December 1, 1997, providing financial, strategic and business advisory services. The consulting agreement with Mr. Frank expired December 1, 1998 but was renewed by mutual agreement of Mr. Frank and us. Lehman Brothers is an



affiliate of such selling stockholder.

- (2) Represents the maximum number of shares of common stock which may be acquired within 60 days of June 30, 1999 upon (i) the conversion of the convertible preferred stock held by such selling stockholder, (ii) the conversion of the dividends that may accrue on the shares of convertible preferred stock held by such selling stockholder during the period from the June 15, 2002 through June 15, 2004, (iii) the exercise of the warrants issued to such selling stockholder, (iv) the conversion of \$4 million of convertible preferred stock that may be acquired by such selling stockholder at a subsequent closing, subject to certain conditions, (v) the conversion of the dividends that may accrue on the shares of convertible preferred stock that may be acquired by such selling stockholder during the period from the June 15, 2002 through June 15, 2004 at a subsequent closing, subject to certain conditions, and (vi) the exercise of additional warrants that may be issued to such selling stockholder in connection with the conversion of \$4 million of convertible preferred stock that may be acquired by such selling stockholder at a subsequent closing, subject to certain conditions.
- (3) Represents shares of common stock which may be acquired within 60 days of June 30, 1999 upon the conversion of the convertible debenture held by such selling stockholder. Does not include up to an additional 160,000 shares of common stock which may be acquired by such selling stockholder upon the conversion of the entire outstanding principal amount of the convertible debenture held by such selling stockholder at any time after April 15, 2000. Does not include up to an additional 84,000 shares of common stock which may be acquired by such selling stockholder upon the conversion of all interest accrued through April 15, 2002 with respect to the convertible debenture held by such selling stockholder.
- (4) Represents the maximum number of shares of common stock which can be acquired by such selling stockholder upon the conversion on April 15, 2002 of the convertible debenture held by such selling stockholder.

#### Plan of Distribution

The selling stockholders or their transferees may, from time to time, sell all or a portion of the shares of common stock being registered pursuant to this prospectus in privately negotiated transactions or otherwise, at fixed prices that may be changed, at market prices prevailing at the time of sale, at prices related to such market prices or at negotiated prices. The shares may be sold by the selling stockholders by one or more of the following methods, without limitation:

19

- block trades in which the broker or dealer so engaged will attempt to sell the shares as agent but may position and resell a portion of the block as principal to facilitate the transaction;
- purchases by a broker or dealer as principal and resale by such broker or dealer for its account pursuant to this prospectus;
- an exchange distribution in accordance with the rules of the applicable exchange;
- ordinary brokerage transactions and transactions in which the broker solicits purchasers;
- privately negotiated transactions;

- short sales;
- a combination of any such methods of sale; and
- any other method permitted pursuant to applicable law.

From time to time, the selling stockholders may engage in short sales, short sales against the box, puts and calls and other transactions in our securities or derivatives of such securities, and may sell and deliver the shares in connection therewith or in settlement of securities loans. From time to time, the selling stockholders may pledge their shares pursuant to the margin provisions of its customer agreements with its brokers. Upon a default by the selling stockholders, the broker may offer and sell the pledged shares from time to time.

In effecting sales, brokers and dealers engaged by the selling stockholders may arrange for other brokers or dealers to participate in such sales. Brokers or dealers may receive commissions or discounts from the selling stockholders (or, if any such broker-dealer acts as agent for the purchaser of such shares, from such purchaser) in amounts to be negotiated which are not expected to exceed those customary in the types of transactions involved. Broker-dealers may agree with the selling stockholders to sell a specified number of such shares at a stipulated price per share, and, to the extent such broker-dealer is unable to do so acting as agent for a selling stockholder, to purchase as principal any unsold shares at the price required to fulfill the broker-dealer commitment to the selling stockholders.

Broker-dealers who acquire shares as principal may thereafter resell such shares from time to time in transactions (which may involve block transactions and sales to and through other broker-dealers, including transactions of the nature described above) in the over-the-counter market or otherwise at prices and on terms then prevailing at the time of sale, at prices then related to the then-current market price or in negotiated transactions and, in connection with such resales, may pay to or receive from the purchasers of such shares commissions as described above. The selling stockholders may also sell the shares in accordance with Rule 144 under the Securities Act of 1933, rather than pursuant to this prospectus.

The selling stockholders and any broker-dealers or agents that participate with the selling stockholders in sales of the shares may be deemed to be "underwriters" within the meaning of the

Securities Act of 1933 in connection with such sales. In such event, any commissions received by such broker-dealers or agents and any profit on the resale of the shares purchased by them may be deemed to be underwriting commissions or discounts under the Securities Act of 1933.

We have agreed to indemnify the selling stockholders against certain losses, claims, damages and liabilities, including liabilities under the Securities Act of 1933.

We have informed the selling stockholders that the anti-manipulation provisions of Regulation M under the Securities Exchange Act of 1934 may apply to the sales of their shares offered hereby. We have also advised the selling stockholders of the requirement for delivery of this prospectus in connection with any sale of the shares offered hereby.

Certain selling stockholders may from time to time purchase shares of common stock in the open market. These selling stockholders have been notified that they should not commence any distribution of shares unless they have terminated their purchasing and bidding for common stock in the open market as provided in applicable securities regulations.

There is no assurance that the selling stockholders or their transferees will sell any or all of the shares offered by them in this prospectus.

Legal Matters

The validity of the shares of common stock offered hereby will be passed upon for us by Patterson, Belknap, Webb & Tyler LLP, 1133 Avenue of the Americas, New York, New York.

Experts

Our financial statements as of December 31, 1998 and for the year ended December 31, 1998 incorporated by reference in this prospectus and registration statement have been audited by BDO Seidman LLP, independent auditors, as set forth in their report dated March 15, 1999, except for note 6, which is dated April 15, 1999, and are in reliance upon the authority of BDO Seidman LLP as experts in accounting and auditing. Our financial statements as of December 31, 1997 and for the year ending December 31, 1997 and 1996 incorporated by reference in this prospectus and registration statement have been audited by Wiss & Company, independent auditors, as set forth in their report dated February 17, 1998.

21

We have not authorized any dealer, salesman or other person to make any representation not contained in this prospectus. Do not rely on any information or representation not contained in herein. This prospectus is not an offer to sell any of the securities offered hereby in those jurisdictions where such an offer would be unlawful.

3,241,380 Shares of Common Stock

CONTENTS

	Page	CHROMATICS COLOR SCIENCES INTERNATIONAL, INC.
About This Prospectus .....		
General Information About Chromatics .....		
Risk Factors.....		
Where You Can Get More Information.....		_____
Use of Proceeds.....		PROSPECTUS
Forward-Looking Statements.....		_____
Selling Stockholders.....		
Plan of Distribution.....		June __, 1999
Legal Matters.....		
Experts.....		

PART II

Information Not Required in Prospectus

Item 14. Other Expenses of Issuance and Distribution.

The following table sets forth the various estimated amount of fees and expenses payable in connection with this offering other than sales commissions. All such expenses will be borne by the registrant.

Item	Amount of Expenses
SEC Registration Fee	\$ 7,603.06
Printing Expenses	30,000*
Accounting Fees and Expenses	3,000*
Legal Fees and Expenses	30,000*
Miscellaneous Expenses	1,000*
	-----
Total	\$71,603.06*

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\* Estimated

Item 15. Indemnification of Directors and Officers.

Section 722 of the Business Corporation Law of the State of New York and Article X of our Certificate of Incorporation contain provisions for the indemnification of officers and directors of CCSI. The Certificate of Incorporation requires us to indemnify such persons to the full extent permitted by New York Law. Each person will be indemnified in any proceeding if he or she acted in good faith and in a manner which he or she reasonably believed to be in, or not opposed to, the best interests of CCSI. Indemnification would cover judgments, fines, amounts paid in settlement and reasonable expenses, including attorney's fees.

We have directors' and officers' liability insurance. Such insurance may cover liabilities asserted against any present or past director or officer incurred in the capacity of director or officer arising out of such status, whether or not we would have the power to indemnify such person.

II-1

Item 16. Exhibits.

Number	Description of Document
3.1	Restated Articles of Incorporation of CCSI (incorporated by reference to Exhibit 3.1 to our Registration Statement on Form S-1 (File No. 33-54256), filed on November 5, 1992, as amended).
3.1.1	Certificate of Amendment to the Certificate of Incorporation of CCSI regarding the change of our name (incorporated by reference to Exhibit 3.1.1 to the November 5, 1992 Registration Statement).
3.1.2	Certificate of Amendment to the Certificate of Incorporation of CCSI increasing the authorized number of shares of common stock and increasing the authorized number of shares of preferred stock (incorporated by reference to Exhibit 3.1.2 to our Annual Report on Form 10-KSB for the fiscal year ended December 31, 1996).
3.1.3	Certificate of Amendment to the Certificate of Incorporation of CCSI dated February 13, 1998 effecting the three-for-two stock split and certain changes to our Class A convertible preferred stock (incorporated by reference to Exhibit 3.1.3 to our Annual Report on Form 10-K for the fiscal year ended December 31, 1997).
3.1.4	Certificate of Amendment to the Certificate of Incorporation of CCSI dated January 8, 1999 to fix the relative rights, preferences and limitations with respect to our Class B preferred stock, pursuant to the adoption of the Shareholders' Rights Plan (incorporated by reference as Exhibit 1 to the Form 8-A dated January 5, 1999).
3.1.5+	Certificate of Amendment to the Certificate of Incorporation of CCSI

dated June 11, 1999 to further fix the relative rights, preferences and limitations with respect to our Class B preferred stock.

- 3.1.6+ Certificate of Correction of the Certificate of Amendment to the Certificate of Incorporation of CCSI dated June 16, 1999 to correct an error in the Certificate of Amendment to the Certificate of Incorporation of CCSI dated June 11, 1999.
- 3.1.7+ Certificate of Amendment to the Certificate of Incorporation of CCSI dated June 16, 1999 to further fix the relative rights, preferences and limitations with respect to our Class B preferred stock.
- 3.2 By-Laws of CCSI (incorporated by reference to Exhibit 3.2 to the November 5, 1992 Registration Statement).
- 4 See Exhibits 3.1, 3.1.1, 3.1.2, 3.1.3, 3.1.4, 3.1.5, 3.1.6, 3.1.7 and 3.2.
- 5 Opinion Regarding Legality.
  
- 23.1 Consent of BDO Seidman, LLP.
  
- 23.2 Consent of Wiss & Company, LLP.
  
- 24+ Power of Attorney (see page II-6 of this Registration Statement).

+ Previously Filed

II-2

Item 17. 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 of 1933;
- (ii) to reflect in the prospectus any facts or events arising after the effective date of the registration statement (or the most recent post-effective amendment thereof) which, individually or in the aggregate, represents a fundamental change in the information set forth in the registration statement;
- (iii) to include any material information with respect to the plan of distribution not previously disclosed in this registration statement or any material change to such information in this registration statement;

provided, however, that paragraphs (i) and (ii) do not apply to this registration statement if the information required to be included in a post-effective amendment by those paragraphs is contained in periodic reports filed by the registrant pursuant to Section 13 or Section 15 (d) of the Securities Exchange Act of 1934 and incorporated by reference in this registration statement;

(2) that, for the purpose of determining any liability under the Securities Act of 1933, 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 the purpose of determining any liability

II-3

under the Securities Act of 1933, each filing of the registrant's annual report pursuant to Section 13 (a) or Section 15 (d) of the Securities Exchange Act of 1934 that is incorporated by reference in this registration statement shall be deemed to be a new registration statement relating to the securities offered herein, 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 of 1933 may be permitted to directors, officers and controlling persons of the registrant pursuant to the provisions described in the first paragraph of Item 15 above, or otherwise, the registrant has been advised that in the opinion of the SEC such indemnification is against public policy as expressed in said Securities Act of 1933 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 of 1933 and will be governed by the final adjudication of such issue.

II-4

#### 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 Amendment to this registration statement to be signed on its behalf by the undersigned, thereunto duly authorized, in New York, State of New York, on July 27, 1999.

CHROMATICS COLOR SCIENCES  
INTERNATIONAL, INC.

Date: July 27, 1999

By: /s/ Darby S. Macfarlane

-----  
Darby S. Macfarlane  
Chairperson of the Board  
and Chief Executive Officer

In accordance with the Securities Act of 1933, this report has been signed below by the following persons on behalf of the registrant and in the capacities and on the dates indicated.

Darby S. Macfarlane,  
Chairperson of the Board and Chief Executive Officer  
(Principal Executive Officer)

\*

July 27, 1999

Leslie Foglesong,  
Director, Secretary and Treasurer  
(Principal Financial and Accounting Officer)

\*

July 27, 1999

David Kenneth Macfarlane,  
Director, Vice-President - Research and Development

II-5

\*

July 27, 1999

Edmund Vimond, Director

\*

July 27, 1999

Edward Mahoney, Director

\* By: /S/ Darby S. Macfarlane

July 27, 1999

Darby S. Macfarlane  
Attorney-In-Fact

II-6

EXHIBIT INDEX

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3.1.2	Certificate of Amendment to the Certificate of Incorporation of CCSI increasing the authorized number of shares of common stock and increasing the authorized number of shares of preferred stock (incorporated by reference to Exhibit 3.1.2 to our Annual Report on Form 10-KSB for the fiscal year ended December 31, 1996).

- 3.1.3 Certificate of Amendment to the Certificate of Incorporation of CCSI dated February 13, 1998 effecting the three-for-two stock split and certain changes to our Class A convertible preferred stock (incorporated by reference to Exhibit 3.1.3 to our Annual Report on Form 10-K for the fiscal year ended December 31, 1997).
- 3.1.4 Certificate of Amendment to the Certificate of Incorporation of CCSI dated January 8, 1999 to fix the relative rights, preferences and limitations with respect to our Class B preferred stock, pursuant to the adoption of the Shareholders' Rights Plan (incorporated by reference as Exhibit 1 to the Form 8-A dated January 5, 1999).
- 3.1.5+ Certificate of Amendment to the Certificate of Incorporation of CCSI dated June 11, 1999 to further fix the relative rights, preferences and limitations with respect to our Class B preferred stock.
- 3.1.6+ Certificate of Correction of the Certificate of Amendment to the Certificate of Incorporation of CCSI dated June 16, 1999 to correct an error in the Certificate of Amendment to the Certificate of Incorporation of CCSI dated June 11, 1999.
- 3.1.7+ Certificate of Amendment to the Certificate of Incorporation of CCSI dated June 16, 1999 to further fix the relative rights, preferences and limitations with respect to our Class B preferred stock.
- 3.2 By-Laws of CCSI (incorporated by reference to Exhibit 3.2 to the November 5, 1992 Registration Statement).
- 4 See Exhibits 3.1, 3.1.1, 3.1.2, 3.1.3, 3.1.4, 3.1.5, 3.1.6, 3.1.7 and 3.2.
- 5 Opinion Regarding Legality.
- 23.1 Consent of BDO Seidman, LLP.
- 23.2 Consent of Wiss & Company, LLP.
- 24+ Power of Attorney (see page II-6 of this Registration Statement).

+ Previously Filed



Certificate of Amendment of the Certificate of Incorporation

of

CHROMATICS COLOR SCIENCES INTERNATIONAL, INC.

Under Section 805 of the Business Corporation Law

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It is hereby certified that:

FIRST: The name of the corporation (the "Corporation") is CHROMATICS COLOR SCIENCES INTERNATIONAL, INC.

SECOND: The Certificate of Incorporation of the Corporation was filed by the Department of State on March 30, 1984. The Corporation was formed under the name Chromatics International, Inc.

THIRD: The Certificate of Incorporation of the Corporation, as heretofore amended, is hereby further amended to fix the relative rights, preferences and limitations with respect to the Class B Preferred Stock of the Corporation.

FOURTH: To accomplish the foregoing,

(i) Paragraph D of Article FOURTH of the Certificate of Incorporation of the Corporation is amended to read as follows:

"3. Class B Series 2 Preferred Stock:

(1) The Corporation has authorized the creation of a series of Class B Preferred Stock to be designated "Class B Series 2 Convertible Preferred Stock" (the "Class B Convertible Preferred Stock").

(2) The number of shares constituting the Class B Convertible Preferred Stock shall be fixed at 80,000. The Class B Convertible Preferred Stock shall have no par value.

(3) The shares of Class B Convertible Preferred Stock shall, with respect to the distribution of assets on liquidation, dissolution or winding up of the Corporation, rank (i) senior and prior to the common stock, \$.001 par value (the "Common Stock"), of the Corporation and any other class or series of capital stock of the Corporation hereafter issued, the terms of which specifically provide that shares of such class or series shall rank junior to shares of Class B Convertible Preferred Stock (collectively, the "Junior

Securities"), (ii) on a parity with any other class or series of capital stock of the Corporation hereafter issued, the terms of which specifically provide that shares of

such class or series shall rank on a parity with the shares of Class B Convertible Preferred Stock (collectively, the "Parity Securities") and (iii) junior to the Class A Convertible Preferred Stock and any other class or series of capital stock of the Corporation hereafter issued, the terms of which specifically provide that shares of such class or series shall rank senior to shares of Class B Convertible Preferred Stock (collectively, the "Senior Securities").

(4) The holders of shares of Class B Convertible Preferred Stock shall not be entitled to any voting rights other than those provided by law. However, so long as any shares of Class B Convertible Preferred Stock are outstanding, the Corporation shall not and shall cause its subsidiaries not to, without the affirmative vote of the holders of a majority of the shares of the Class B Convertible Preferred Stock then outstanding, (a) alter or change adversely the absolute or relative powers, preferences or rights given to the Class B Convertible Preferred Stock, (b) alter or amend this Certificate of Amendment, (c) authorize or create any class of stock ranking as to dividends or distribution of assets upon a liquidation or otherwise senior to the Class B Convertible Preferred Stock, (d) amend its Certificate of Incorporation, bylaws or other charter documents so as to affect adversely any rights of any holders of Class B Convertible Preferred Stock, (e) increase the authorized number of shares of Class B Convertible Preferred Stock or (f) enter into any agreement with respect to the foregoing.

(5) Except as set forth in Section 7 hereof, the holders of shares of Class B Convertible Preferred Stock shall not be entitled to receive dividends with respect thereto.

(6) (a) In the event of any voluntary or involuntary liquidation, dissolution or winding up of the affairs of the Corporation, before any distribution or payment shall be made to the holders of outstanding Junior Securities, including, but not limited to, the Common Stock, the holders of outstanding shares of Class B Convertible Preferred Stock shall be entitled to receive, out of the assets of the Corporation at the time legally available therefor, in exchange for their shares of Class B Convertible Preferred Stock an amount in cash equal to \$100.00 per share of Class B Convertible Preferred Stock, together with all accrued but unpaid dividends thereon, on a pari passu basis with the rights of the holders of any Parity Securities; provided, however, that the holders of the Class B Convertible Preferred Stock and any outstanding Parity Securities shall not be entitled to receive such preferential liquidation payments until the preferential liquidation payments on all outstanding Senior Securities have been paid in full. If, upon any such voluntary or involuntary liquidation, dissolution or winding up of the affairs of the Corporation, the assets of the Corporation available therefor shall be insufficient to permit the payment in full to the holders of outstanding shares of Class B Convertible Preferred Stock of the preferential liquidation amounts

to which they are then entitled pursuant to the provisions of this clause (a), the entire assets of the Corporation thus distributable shall be distributed among the holders of outstanding shares of Class B Convertible Preferred Stock and any Parity Securities ratably, in proportion to the full

2

amounts to which such holders would otherwise be entitled if such assets were sufficient to permit payment in full.

(b) Upon any such voluntary or involuntary liquidation, dissolution or winding up of the affairs of the Corporation, after the payment in full to the holders of outstanding shares of Class B Convertible Preferred Stock and any Parity Securities of the preferential liquidation amounts to which they are then entitled pursuant to the provisions of clause (a) above, the holders of outstanding shares of Class B Convertible Preferred Stock shall not be entitled to participate in any further distributions made to the holders of the Common Stock or any other class of Senior Securities or Junior Securities.

(c) At the option of the holders of a majority of the issued and outstanding Class B Convertible Preferred Stock, the sale of all or substantially all of the assets of the Corporation or the merger of the Corporation with or into another corporation shall be deemed to be a dissolution, liquidation or winding up of the Corporation.

(7) (a) On the third anniversary of the date of initial issuance of the shares of Class B Convertible Preferred Stock (the "Redemption Date"), and provided the Corporation has not delivered a timely Extension Notice (as hereinafter defined), all of the outstanding shares of Class B Convertible Preferred Stock shall be subject to mandatory redemption by the Corporation for a purchase price payable in cash equal to \$115.00 per share (such amount is hereinafter referred to the "Redemption Amount").

(b) From and after the Redemption Date, unless (i) default shall be made by the Corporation on the Redemption Date in providing funds for the payment of the Redemption Amount payable, or (ii) the Corporation, in its sole discretion, has notified the holders of the shares of Class B Convertible Preferred Stock by written notice delivered at least thirty (30) days prior to the Redemption Date (the "Extension Notice") of its election to extend the Redemption Date to the fifth anniversary of the date of initial issuance of the shares of Class B Convertible Preferred Stock (the "Extended Redemption Date"), all rights of the holders of the shares of Class B Convertible Preferred Stock surrendered for redemption, except the right to receive the Redemption Amount in respect of such shares, shall cease and terminate. The redemption of the shares of Class B Convertible Preferred Stock upon the Redemption Date shall take place at the principal place of business of the Corporation. On the Redemption Date, the Corporation shall tender the Redemption Amount by check, subject to collection, against receipt of the certificate or certificates representing the shares of Class B Convertible Preferred Stock being redeemed.

(c) If the Redemption Date has been extended to the Extended Redemption Date by timely delivery by the Corporation of the Extension Notice to each of the holders of the shares of Class B Convertible Preferred Stock then outstanding, on the Extended Redemption Date all of the outstanding shares of Class B Convertible Preferred Stock shall be subject to mandatory redemption by the Corporation for a

3

purchase price payable in cash equal to \$115.00 per share, together with all accrued but unpaid Extension Dividends (as hereinafter defined) (such amount is hereinafter referred to the "Extended Redemption Amount"). The "Extension Dividends" shall be the aggregate amount of dividends accrued and owing on the Class B Convertible Preferred Stock, which shall be paid at the rate of \$8.00 per share per annum (computed on the basis of the actual number of days elapsed over a year of 365 days), shall accrue beginning on the day after the Redemption Date and shall be cumulative whether or not declared. From and after the Extended Redemption Date, unless default shall be made by the Corporation on the Extended Redemption Date in providing funds for the payment of the Extended Redemption Amount payable, all rights of the holders of the shares of Class B Convertible Preferred Stock surrendered for redemption, except the right to receive the Extended Redemption Amount in respect of such shares, shall cease and terminate. The redemption of the shares of Class B Convertible Preferred Stock upon the Extended Redemption Date shall take place at the principal place of business of the Corporation. On the Extended Redemption Date, the Corporation shall tender the Extended Redemption Amount by check, subject to collection, against receipt of the certificate or certificates representing the shares of Class B Convertible Preferred Stock being redeemed.

(8) (a) Subject to the provision for adjustment set forth below, each share of the Class B Convertible Preferred Stock, plus the aggregate amount of all accrued but unpaid Extension Dividends, shall be convertible at the option of the holder thereof at any time after the date hereof, into a number of shares of Common Stock equal to the then effective Conversion Ratio (as hereinafter defined). As used herein, "Conversion Ratio," determined as of any date, shall equal the number of shares of Common Stock into which one share of Class B Convertible Preferred Stock is convertible pursuant to this Section 8, which shall be determined by dividing \$100.00, plus the amount of all accrued but unpaid Extension Dividends per share, by the then effective Conversion Price (as defined below). The "Conversion Price" shall initially be \$10.00 and shall be subject to adjustment as provided in Section 8(d). The Conversion Ratio shall initially be ten shares and shall be subject to adjustment as provided in Section 8(d).

(b) The Corporation shall at all times reserve and keep available for issuance upon the conversion of Class B Convertible Preferred Stock, free from any preemptive rights or any other actual contingent purchase rights of persons other than the holders of Class B Convertible Preferred Stock, such number of shares of its authorized but unissued shares of Common Stock as will from time to time be necessary to permit the conversion of all outstanding shares of Class

B Convertible Preferred Stock, together with all accrued but unpaid dividends thereon, into shares of Common Stock, and shall take all action required to increase the authorized number of shares of Common Stock if necessary to permit the conversion of all outstanding shares of Class B Convertible Preferred Stock. The Corporation covenants that all shares of Common Stock that shall be so issuable shall, upon issue, be duly and validly authorized, fully paid, nonassessable and freely tradeable.

4

(c) (i) Conversion of Class B Convertible Preferred Stock may be effected by any holder thereof upon the surrender to the Corporation at the offices of the Corporation of certificates representing Class B Convertible Preferred Stock to be converted, accompanied by a written notice stating that such holder elects to convert all or a specified portion of such Class B Convertible Preferred Stock in accordance with the provisions of this Section 8 and specifying the name or names in which such holder wishes the certificate or certificates for shares of Common Stock to be issued. The Corporation shall pay the issue and transfer taxes that may be payable in respect of any issue or delivery of shares of Common Stock on conversion of Class B Convertible Preferred Stock pursuant hereto. As promptly as practicable, and in any event within two business days after the surrender of such certificates representing Class B Convertible Preferred Stock and the receipt of such notice relating thereto, the Corporation shall deliver or cause to be delivered (i) certificates representing the number of validly issued, fully paid and nonassessable shares of Common Stock to which the holder of Class B Convertible Preferred Stock being converted shall be entitled and (ii) if less than all of the shares represented by the surrendered certificates are being converted, a new certificate representing the number of shares of Class B Convertible Preferred Stock which remains outstanding upon such partial conversion. Such conversion shall be deemed to have been made at the close of business on the date of giving such notice so that the rights of the holder thereof as to Class B Convertible Preferred Stock being converted shall cease except for the right to receive shares of Common Stock in accordance herewith, and the persons entitled to receive shares of Common Stock shall be treated for all purposes as having become the record holder of such shares of Common Stock at such time.

(ii) If the Corporation fails to deliver to the holder such certificate or certificates pursuant to this Section 8, including for purposes hereof, any shares of Common Stock to be issued on account of accrued but unpaid dividends hereunder, on or prior to the third trading day after the date the holder surrenders to the Corporation the certificates to be converted (the "Delivery Date"), in addition to all other remedies that such holder may pursue hereunder or otherwise, the Corporation shall pay to such holder in cash, as liquidated damages and not as a penalty, \$1,000 per day (increasing to \$5,000 per day after the fifth trading day after the Delivery Date) until such certificates are delivered. If the Corporation fails to deliver to the holder such certificate or certificates pursuant to this Section 8 prior to the 15th day after the Delivery Date the Corporation shall, at the holder's option, (i) redeem from funds legally available therefor at the time of such redemption, such number of shares

of Preferred Stock then held by such holder, as requested by such holder and (ii) pay all accrued but unpaid dividends on account of the Class B Convertible Preferred Stock for which the Corporation shall have failed to issue Common Stock certificates hereunder, in cash. If such holder opts to redeem any number of shares of Preferred Stock pursuant to this Section 8(c)(ii), then the Corporation shall immediately redeem, from funds legally available therefor at the time of such redemption, such number of shares of Class B Convertible Preferred Stock then held by such holder, as requested by such holder. The redemption price shall be equal to the sum of (A) the aggregate of all accrued but unpaid dividends, plus

5

(B) the number of shares of Class B Convertible Preferred Stock then held by such holder multiplied by (1) the average closing price of the Corporation's Common Stock for the five trading days immediately preceding the Delivery Date multiplied by (2) the Conversion Ratio calculated on the Delivery Date. If the holder has requested that the Corporation redeem shares of Class B Convertible Preferred Stock pursuant to this Section 8(c)(ii) and the Corporation fails for any reason to pay the redemption price referenced above within seven days after such notice is deemed delivered pursuant to Section 8(c)(ii), the Corporation will pay interest on the redemption price at a rate of 15% per annum in cash to such holder, accruing from such seventh day until the redemption price and any accrued interest thereon is paid in full. Nothing herein shall limit a holder's right to pursue actual damages for the Corporation's failure to deliver certificates representing shares of Common Stock upon conversion within the period specified herein (including, without limitation, damages relating to any purchase of shares of Common Stock by such holder to make delivery on a sale effected in anticipation of receiving certificates representing shares of Common Stock upon conversion, such damages to be in an amount equal to (A) the aggregate amount paid by such holder for the shares of Common Stock so purchased minus (B) the aggregate amount of net proceeds, if any, received by such holder from the sale of the shares of Common Stock issued by the Corporation pursuant to such conversion), and such holder shall have the right to pursue all remedies available to it at law or in equity (including, without limitation, a decree of specific performance and/or injunctive relief).

(iii) In addition to any other rights available to the holder, if the Corporation fails to deliver to the holder such certificate or certificates pursuant to Section 8(c)(ii) by the Delivery Date and after the Delivery Date the holder purchases (in an open market transaction or otherwise) shares of Common Stock to deliver to the satisfaction of a sale by such holder of the shares underlying the Class B Convertible Preferred Stock which the holder anticipated receiving on the Delivery Date upon such conversion (a "Buy-In"), then the Corporation shall pay in cash to the holder (in addition to any remedies available to or elected by the holder) the amount by which (A) the holder's total purchase price (including brokerage commissions, if any) for the shares of Common Stock purchased for a Buy-In exceeds (B) the aggregate Conversion Price for the number of shares of Common Stock in the Buy-In for which such conversion was not timely honored. For example, if the holder

purchases shares of Common Stock having a total purchase price of \$11,000 to cover a Buy-In with respect to an attempted conversion of \$10,000 aggregate Conversion Price for the number of shares of Common Stock in the Buy-In, the Corporation shall be required to pay the holder \$1,000. The holder shall provide the Corporation written notice indicating the amounts payable to the holder in respect of the Buy-In.

(d) (i) In the event of any change in the number of issued and outstanding shares of capital stock of the Corporation by reason of any stock split, stock dividend, subdivision, merger, consolidation, recapitalization, combination, conversion or exchange of shares, or any other change in the corporate or capital structure of the Corporation which would have the effect of diluting or otherwise adversely affecting the

6

rights and privileges of the holders of Class B Convertible Preferred Stock under this Section 8, the Conversion Ratio and Conversion Price in effect on the effective date thereof shall be adjusted so that the holder of any shares of Class B Convertible Preferred Stock shall be entitled to receive the number and type of shares of Common Stock or other securities of the Corporation which such holder would have owned or have been entitled to receive after the happening of any of the events described above had such shares of Class B Convertible Preferred Stock been converted into Common Stock immediately prior to the happening of such event or the record date therefor. An adjustment made pursuant to this Section 8(d) shall become effective (x) in the case of any such dividend or distribution to holders of shares of Common Stock entitled to receive such dividend or distribution, or (y) in the case of such subdivision, merger, consolidation, recapitalization, combination, conversion or exchange, at the close of business on the day upon which such corporate action becomes effective.

(ii) Except with respect to Excluded Securities (as defined below), in case the Corporation shall issue any shares of Common Stock or Common Stock Equivalents (as defined below) after the date of initial issuance of the shares of Class B Convertible Preferred Stock (the "Issue Date") at a price per share (or having a conversion or exercise price per share) of less than \$10.00 per share (the "Adjusted Conversion Price"), in each such case the Conversion Price as in effect immediately prior thereto shall be reduced to the Adjusted Conversion Price and the Conversion Ratio shall be recalculated by dividing \$100.00 by the Adjusted Conversion Price. Any adjustment made pursuant to this clause (ii) shall be made on the next business day following the date on which any such issuance is made and shall be effective retroactively to the close of business on the date of such issuance. For purposes of this clause (ii), the consideration receivable by the Corporation in connection with the issuance of additional shares of Common Stock or of Common Stock Equivalents since the Issue Date shall be deemed to be equal to (X) in the case the consideration received by the Corporation is cash, the sum of the aggregate offering price (before deduction of underwriting discounts or commissions and expenses payable to third parties, if any) of all such Common Stock and/or Common Stock Equivalents plus the minimum aggregate amount, if any, payable upon conversion, exchange or

exercise of any such Common Stock Equivalents, and (Y) in the case the consideration received by the Corporation is other than cash, the fair market value of the consideration received by the Corporation as determined by the good faith judgment of the Board of Directors of the Corporation provided, however, that in the event the holder disagrees in good faith with the determination of the Board of Directors of the Corporation, such fair market value shall be determined by a nationally recognized or major regional investment banking firm or firm of independent certified public accountants of recognized standing (an "Appraiser") selected in good faith by the holders of the Class B Convertible Preferred Stock; and provided, further, that the Corporation, after receipt of the determination by such Appraiser shall have the right to select in good faith an additional Appraiser meeting the same qualifications, in which case the fair market value shall be equal to the average of the determinations by each such Appraiser. Such adjustment shall be made whenever any such distribution is made and shall become effective

7

immediately after the record date mentioned above. The issuance or reissuance of any shares of Common Stock or Common Stock Equivalents (whether treasury shares or newly issued shares) pursuant to a dividend or distribution on, or subdivision, combination or reclassification of, the outstanding shares of Common Stock requiring an adjustment in the Conversion Price and Conversion Ratio pursuant to this clause (ii) shall not be deemed to constitute an issuance of Common Stock or Common Stock Equivalents by the Corporation to which clause (i) of this Section 8(d) applies. Upon the expiration or termination of any unconverted, unexchanged or unexercised Common Stock Equivalents for which an adjustment has been made pursuant to this clause (ii), the adjustments shall forthwith be reversed to effect such Conversion Ratio as would have been in effect at the time of such expiration or termination had such Common Stock Equivalents, to the extent outstanding immediately prior to such expiration or termination, had never been issued. As used herein, "Excluded Securities" shall mean: (i) shares of Common Stock issuable upon conversion of the Class B Convertible Preferred Stock; (ii) shares of Common Stock issuable or issued to employees of the Corporation pursuant to the Management Option Plan (as hereinafter defined); (iii) any capital stock issued as a stock dividend or upon any stock split or other subdivision or combination of shares of the Corporation's capital stock; (iv) shares of Common Stock issuable upon conversion of any Common Stock Equivalents outstanding on the Issue Date, (v) shares of Common Stock issuable upon conversion of the Corporation's Class A Convertible Preferred Stock outstanding on the Issue Date or (vi) Common Stock issued upon the conversion or exercise of Common Stock Equivalents issued after the Issue Date as to which an adjustment to the Conversion Ratio has been made pursuant to this clause (d) upon the issuance of such Common Stock Equivalents. As used herein, "Common Stock Equivalents" shall mean securities convertible into, or exchangeable or exercisable for, shares of Common Stock of the Corporation. As used herein, the "Management Option Plan" shall mean the Corporation's 1992 Stock Option Plan, as amended.

(iii) If the Corporation shall set a record date for the holders of its



Common Stock for the purpose of entitling them to receive a dividend or other distribution and shall thereafter, and before such dividend or distribution is paid or delivered to stockholders entitled thereto, legally abandon its plan to pay or deliver such dividend or distribution, then no adjustment in the Conversion Ratio or the Conversion Price then in effect shall be made by reason of the taking of such record, and any such adjustment previously made as a result of the taking of such record shall be reversed.

(e) (i) Unless sooner redeemed or converted in accordance with the provisions of Section 7 hereof or this Section 8 the outstanding shares of Class B Convertible Preferred Stock shall be subject to involuntary conversion at the option of the Corporation, at its sole discretion, in whole but not in part, at any time after six months after the Issue Date, for shares of the Corporation's Common Stock at the Conversion Ratio. The Corporation may effectuate such involuntary conversion on such date (the "Involuntary Conversion Date") provided that the following conditions have been met:

8

- (A) the Current Market Price (as hereinafter defined) of the Common Stock is equal to or in excess of one hundred and fifty percent (150%) of the Conversion Price for a period of at least ten (10) consecutive trading days; and
- (B) all of the shares of Common Stock into which the Preferred Stock is being converted have been registered under the Securities Act of 1933, as amended, and such registration has been declared effective by the Securities and Exchange Commission, and is effective on such date; and
- (C) the Corporation has a sufficient number of authorized shares of Common Stock reserved for issuance upon full conversion of the Class B Convertible Preferred Stock.

As used herein, "Current Market Price" shall mean for any day, the last sale price for the Common Stock on the principal securities exchange on which the Common Stock is listed or admitted to trading, or, if not so listed or admitted to trading on any securities exchange, the last sale price for the Common Stock on the National Association of Securities Dealers National Market System, or, if the Common Stock shall not be listed on such system, the closing bid price in the over-the-counter market.

(ii) Notice of involuntary conversion of outstanding shares of Class B Convertible Preferred Stock shall be sent by or on behalf of the Corporation, postage prepaid, to the holders of record of outstanding shares of Class B Convertible Preferred Stock not less than ten (10) and not more than twenty (20) days prior to the Involuntary Conversion Date.

(iii) Notice having been so given as provided in clause (ii) above, from and after the Involuntary Conversion Date, unless default shall be made by

the Corporation on the Involuntary Conversion Date in issuing the Common Stock issuable upon conversion of the Class B Convertible Preferred Stock pursuant to the Conversion Ratio, all rights of the holders of the shares of Class B Convertible Preferred Stock surrendered for conversion, except the right to receive the Common Stock in respect of such shares, shall cease and terminate. The involuntary conversion of the shares of Class B Convertible Preferred Stock for the Common Stock upon the Involuntary Conversion Date shall take place at the principal place of business of the Corporation. On the Involuntary Conversion Date, the Corporation shall tender such Common Stock against receipt of the certificate or certificates representing the shares of Class B Convertible Preferred Stock being converted.

(iv) If any portion of the applicable redemption price under Sections 7 or 8 shall not be paid by the Corporation within seven (7) calendar days after the date due, interest shall accrue thereon at the rate of 15% per annum until the redemption price plus all such interest is paid in full (which amount shall be paid as liquidated damages and not as a penalty). In addition, if any portion of such redemption price remains

9

unpaid for more than seven (7) calendar days after the date due, the holder of the Class B Convertible Preferred Stock subject to such redemption may elect, by written notice to the Corporation given within 30 days after the date due, to either (i) demand conversion in accordance with the formula and the time frame therefor set forth in Section 8 of all of the shares of Class B Convertible Preferred Stock for which such redemption price, plus accrued liquidated damages thereof, has not been paid in full (the "Unpaid Redemption Shares"), in which event the Conversion Price for such shares shall be the lower of the Current Market Price of the Corporation's Common Stock on the date such redemption price was originally due and the Current Market Price of the Corporation's Common Stock as of the holder's written demand for conversion, or (ii) invalidate ab initio such redemption, notwithstanding anything herein contained to the contrary. If the holder elects option (i) above, the Corporation shall within five (5) trading days of its receipt of such election deliver to the holder the shares of Common Stock issuable upon conversion of the Unpaid Redemption Shares subject to such holder conversion demand and otherwise perform its obligations hereunder with respect thereto; or, if the holder elects option (ii) above, the Corporation shall promptly, and in any event not later than five (5) trading days from receipt of holder's notice of such election, return to the holder all of the Unpaid Redemption Shares.

(9) Upon any adjustment of the Conversion Price and the Conversion Ratio then in effect pursuant to the provisions of Section 8, then, and in each such case, the Corporation shall promptly deliver to each of the holders of Class B Convertible Preferred Stock a certificate signed by the President or a Vice President and by the Treasurer or an Assistant Treasurer or the Secretary or an Assistant Secretary of the Corporation setting forth in reasonable detail the event requiring the adjustment, the method by which such adjustment was calculated and the Conversion Price and Conversion Ratio then in effect

following such adjustment. Where appropriate, such notice to the holders of Class B Convertible Preferred Stock may be given in advance."

FIFTH: The foregoing Amendment of the Certificate of Incorporation of the Corporation was authorized by unanimous consent of the Board of Directors of the Corporation.

10

IN WITNESS WHEREOF, the undersigned have signed this Certificate and affirm under the penalties of perjury that the statements made herein are true this 10th day of June, 1999.

/s/ Darby S. Macfarlane

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Darby S. Macfarlane  
Chief Executive Officer and  
Chairman of the Board

[Corporate Seal]

/s/ Leslie Foglesong

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Leslie Foglesong  
Secretary

11

CERTIFICATE OF CORRECTION  
OF  
CERTIFICATE OF AMENDMENT OF THE CERTIFICATE OF INCORPORATION  
OF  
CHROMATICS COLOR SCIENCES INTERNATIONAL, INC.

Under Section 105 of the Business Corporation Law

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It is hereby certified that:

1. The name of the corporation is Chromatics Color Sciences International, Inc.
2. The instrument to be hereby corrected was filed by the Department of State on June 10, 1999.
3. The nature of the informality, error, incorrect statement, or defect of the said instrument to be hereby corrected is as follows: the introductory clause to Article Fourth of the Certificate of Amendment was not clear in indicating that the subsection 3 recited therein was not meant to replace Paragraph D in its entirety, but was meant to be added as a new subsection to Paragraph D of Article Fourth (after existing subsection 2).
4. The introductory clause to Article Fourth of the Certificate of Amendment hereinabove described is hereby corrected to read as follows:

"FOURTH: To accomplish the foregoing,

(i) Paragraph D of Article FOURTH of the Certificate of Incorporation of the Corporation is amended to add a new Section 3 thereof to read in full as follows:"

Signed on June 15, 1999.

/s/ Darby S. Macfarlane

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Darby S. Macfarlane  
Chairperson of the Board



Certificate of Amendment of the Certificate of Incorporation

of

CHROMATICS COLOR SCIENCES INTERNATIONAL, INC.

Under Section 805 of the Business Corporation Law

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It is hereby certified that:

FIRST: The name of the corporation (the "Corporation") is CHROMATICS COLOR SCIENCES INTERNATIONAL, INC.

SECOND: The Certificate of Incorporation of the Corporation was filed by the Department of State on March 30, 1984. The Corporation was formed under the name Chromatics International, Inc.

THIRD: The Certificate of Incorporation of the Corporation, as heretofore amended, is hereby further amended to fix the relative rights, preferences and limitations with respect to the Class B Preferred Stock of the Corporation.

FOURTH: To accomplish the foregoing,

(i) Paragraph D of Article FOURTH of the Certificate of Incorporation of the Corporation is amended to add a new Section 3 thereof to read in full as follows:

"3. Class B Series 2 Preferred Stock:

(1) The Corporation has authorized the creation of a series of Class B Preferred Stock to be designated "Class B Series 2 Convertible Preferred Stock" (the "Class B Convertible Preferred Stock").

(2) The number of shares constituting the Class B Convertible Preferred Stock shall be fixed at 80,000. The Class B Convertible Preferred Stock shall have no par value.

(3) The shares of Class B Convertible Preferred Stock shall, with respect to the distribution of assets on liquidation, dissolution or winding up of the Corporation, rank (i) senior and prior to the common stock, \$.001 par value (the "Common Stock"), of the Corporation and any other class or series of capital stock of the Corporation hereafter issued, the terms of which

specifically provide that shares of such class or series shall rank junior to shares of Class B Convertible Preferred Stock (collectively,

the "Junior Securities"), (ii) on a parity with any other class or series of capital stock of the Corporation hereafter issued, the terms of which specifically provide that shares of such class or series shall rank on a parity with the shares of Class B Convertible Preferred Stock (collectively, the "Parity Securities") and (iii) junior to the Class A Convertible Preferred Stock and any other class or series of capital stock of the Corporation hereafter issued, the terms of which specifically provide that shares of such class or series shall rank senior to shares of Class B Convertible Preferred Stock (collectively, the "Senior Securities").

(4) The holders of shares of Class B Convertible Preferred Stock shall not be entitled to any voting rights other than those provided by law. However, so long as any shares of Class B Convertible Preferred Stock are outstanding, the Corporation shall not and shall cause its subsidiaries not to, without the affirmative vote of the holders of a majority of the shares of the Class B Convertible Preferred Stock then outstanding, (a) alter or change adversely the absolute or relative powers, preferences or rights given to the Class B Convertible Preferred Stock, (b) alter or amend this Certificate of Amendment, (c) authorize or create any class of stock ranking as to dividends or distribution of assets upon a liquidation or otherwise senior to the Class B Convertible Preferred Stock, (d) amend its Certificate of Incorporation, bylaws or other charter documents so as to affect adversely any rights of any holders of Class B Convertible Preferred Stock, (e) increase the authorized number of shares of Class B Convertible Preferred Stock or (f) enter into any agreement with respect to the foregoing.

(5) Except as set forth in Section 7 hereof, the holders of shares of Class B Convertible Preferred Stock shall not be entitled to receive dividends with respect thereto.

(6) (a) In the event of any voluntary or involuntary liquidation, dissolution or winding up of the affairs of the Corporation, before any distribution or payment shall be made to the holders of outstanding Junior Securities, including, but not limited to, the Common Stock, the holders of outstanding shares of Class B Convertible Preferred Stock shall be entitled to receive, out of the assets of the Corporation at the time legally available therefor, in exchange for their shares of Class B Convertible Preferred Stock an amount in cash equal to \$100.00 per share of Class B Convertible Preferred Stock, together with all accrued but unpaid dividends thereon, on a pari passu basis with the rights of the holders of any Parity Securities; provided, however, that the holders of the Class B Convertible Preferred Stock and any outstanding Parity Securities shall not be entitled to receive such preferential liquidation payments until the preferential liquidation payments on all outstanding Senior Securities have been paid in full. If, upon any such voluntary or involuntary liquidation, dissolution or winding up of the affairs

of the Corporation, the assets of the Corporation available therefor shall be insufficient to permit the payment in full to the holders of outstanding shares of Class B

Convertible Preferred Stock of the preferential liquidation amounts to which they are then entitled pursuant to the provisions of this clause (a), the entire assets of the Corporation thus distributable shall be distributed among the holders of outstanding shares of Class B Convertible Preferred Stock and any Parity Securities ratably, in proportion to the full amounts to which such holders would otherwise be entitled if such assets were sufficient to permit payment in full.

(b) Upon any such voluntary or involuntary liquidation, dissolution or winding up of the affairs of the Corporation, after the payment in full to the holders of outstanding shares of Class B Convertible Preferred Stock and any Parity Securities of the preferential liquidation amounts to which they are then entitled pursuant to the provisions of clause (a) above, the holders of outstanding shares of Class B Convertible Preferred Stock shall not be entitled to participate in any further distributions made to the holders of the Common Stock or any other class of Senior Securities or Junior Securities.

(c) At the option of the holders of a majority of the issued and outstanding Class B Convertible Preferred Stock, the sale of all or substantially all of the assets of the Corporation or the merger of the Corporation with or into another corporation shall be deemed to be a dissolution, liquidation or winding up of the Corporation.

(7) (a) On the third anniversary of the date of initial issuance of the shares of Class B Convertible Preferred Stock (the "Redemption Date"), and provided the Corporation has not delivered a timely Extension Notice (as hereinafter defined), all of the outstanding shares of Class B Convertible Preferred Stock shall be subject to mandatory redemption by the Corporation for a purchase price payable in cash equal to \$115.00 per share (such amount is hereinafter referred to the "Redemption Amount").

(b) From and after the Redemption Date, unless (i) default shall be made by the Corporation on the Redemption Date in providing funds for the payment of the Redemption Amount payable, or (ii) the Corporation, in its sole discretion, has notified the holders of the shares of Class B Convertible Preferred Stock by written notice delivered at least thirty (30) days prior to the Redemption Date (the "Extension Notice") of its election to extend the Redemption Date to the fifth anniversary of the date of initial issuance of the shares of Class B Convertible Preferred Stock (the "Extended Redemption Date"), all rights of the holders of the shares of Class B Convertible Preferred Stock surrendered for redemption, except the right to receive the Redemption Amount in respect of such shares, shall cease and terminate. The redemption of the shares of Class B Convertible Preferred Stock upon the Redemption Date shall take place at the principal place of business of the Corporation. On the Redemption Date,



the Corporation shall tender the Redemption Amount by check, subject to collection, against receipt of the certificate or certificates representing the shares of Class B Convertible Preferred Stock being redeemed.

(c) If the Redemption Date has been extended to the Extended Redemption Date by timely delivery by the Corporation of the Extension Notice to each of the holders of the shares of Class B Convertible Preferred Stock then outstanding, on the Extended Redemption Date all of the outstanding shares of Class B Convertible

3

Preferred Stock shall be subject to mandatory redemption by the Corporation for a purchase price payable in cash equal to \$115.00 per share, together with all accrued but unpaid Extension Dividends (as hereinafter defined) (such amount is hereinafter referred to the "Extended Redemption Amount"). The "Extension Dividends" shall be the aggregate amount of dividends accrued and owing on the Class B Convertible Preferred Stock, which shall be paid at the rate of \$8.00 per share per annum (computed on the basis of the actual number of days elapsed over a year of 365 days), shall accrue beginning on the day after the Redemption Date and shall be cumulative whether or not declared. From and after the Extended Redemption Date, unless default shall be made by the Corporation on the Extended Redemption Date in providing funds for the payment of the Extended Redemption Amount payable, all rights of the holders of the shares of Class B Convertible Preferred Stock surrendered for redemption, except the right to receive the Extended Redemption Amount in respect of such shares, shall cease and terminate. The redemption of the shares of Class B Convertible Preferred Stock upon the Extended Redemption Date shall take place at the principal place of business of the Corporation. On the Extended Redemption Date, the Corporation shall tender the Extended Redemption Amount by check, subject to collection, against receipt of the certificate or certificates representing the shares of Class B Convertible Preferred Stock being redeemed.

(8) (a) Subject to the provision for adjustment set forth below, each share of the Class B Convertible Preferred Stock, plus the aggregate amount of all accrued but unpaid Extension Dividends, shall be convertible at the option of the holder thereof at any time after the date hereof, into a number of shares of Common Stock equal to the then effective Conversion Ratio (as hereinafter defined). As used herein, "Conversion Ratio," determined as of any date, shall equal the number of shares of Common Stock into which one share of Class B Convertible Preferred Stock is convertible pursuant to this Section 8, which shall be determined by dividing \$100.00, plus the amount of all accrued but unpaid Extension Dividends per share, by the then effective Conversion Price (as defined below). The "Conversion Price" shall be \$7.25 for the shares of Class B Convertible Preferred Stock issued on the date of initial issuance of shares of Class B Convertible Preferred Stock (the "Issue Date") and shall be subject to adjustment as provided in Section 8(d). For all shares of Class B Convertible Preferred Stock issued subsequent to the Issue Date the "Conversion Price" shall be the lower of (i) \$7.25 and (ii) the average of the closing bid prices of the Common Stock over the five consecutive trading days ending on the date

immediately prior to the date of the issuance of such shares, in either case subject to adjustment as provided in Section 8(d). The Conversion Ratio shall be subject to adjustment as provided in Section 8(d).

(b) The Corporation shall at all times reserve and keep available for issuance upon the conversion of Class B Convertible Preferred Stock, free from any preemptive rights or any other actual contingent purchase rights of persons other than the holders of Class B Convertible Preferred Stock, such number of shares of its authorized but unissued shares of Common Stock as will from time to time be necessary to permit the conversion of all outstanding shares of Class B Convertible Preferred Stock, together

4

with all accrued but unpaid dividends thereon, into shares of Common Stock, and shall take all action required to increase the authorized number of shares of Common Stock if necessary to permit the conversion of all outstanding shares of Class B Convertible Preferred Stock. The Corporation covenants that all shares of Common Stock that shall be so issuable shall, upon issue, be duly and validly authorized, fully paid, nonassessable and freely tradeable.

(c) (i) Conversion of Class B Convertible Preferred Stock may be effected by any holder thereof upon the surrender to the Corporation at the offices of the Corporation of certificates representing Class B Convertible Preferred Stock to be converted, accompanied by a written notice stating that such holder elects to convert all or a specified portion of such Class B Convertible Preferred Stock in accordance with the provisions of this Section 8 and specifying the name or names in which such holder wishes the certificate or certificates for shares of Common Stock to be issued. The Corporation shall pay the issue and transfer taxes that may be payable in respect of any issue or delivery of shares of Common Stock on conversion of Class B Convertible Preferred Stock pursuant hereto. As promptly as practicable, and in any event within two business days after the surrender of such certificates representing Class B Convertible Preferred Stock and the receipt of such notice relating thereto, the Corporation shall deliver or cause to be delivered (i) certificates representing the number of validly issued, fully paid and nonassessable shares of Common Stock to which the holder of Class B Convertible Preferred Stock being converted shall be entitled and (ii) if less than all of the shares represented by the surrendered certificates are being converted, a new certificate representing the number of shares of Class B Convertible Preferred Stock which remains outstanding upon such partial conversion. Such conversion shall be deemed to have been made at the close of business on the date of giving such notice so that the rights of the holder thereof as to Class B Convertible Preferred Stock being converted shall cease except for the right to receive shares of Common Stock in accordance herewith, and the persons entitled to receive shares of Common Stock shall be treated for all purposes as having become the record holder of such shares of Common Stock at such time.

(ii) If the Corporation fails to deliver to the holder such certificate or certificates pursuant to this Section 8, including for purposes hereof, any

shares of Common Stock to be issued on account of accrued but unpaid dividends hereunder, on or prior to the third trading day after the date the holder surrenders to the Corporation the certificates to be converted (the "Delivery Date"), in addition to all other remedies that such holder may pursue hereunder or otherwise, the Corporation shall pay to such holder in cash, as liquidated damages and not as a penalty, \$1,000 per day (increasing to \$5,000 per day after the fifth trading day after the Delivery Date) until such certificates are delivered. If the Corporation fails to deliver to the holder such certificate or certificates pursuant to this Section 8 prior to the 15th day after the Delivery Date the Corporation shall, at the holder's option, (i) redeem from funds legally available therefor at the time of such redemption, such number of shares of Preferred Stock then held by such holder, as requested by such holder and (ii) pay all accrued but unpaid dividends

5

on account of the Class B Convertible Preferred Stock for which the Corporation shall have failed to issue Common Stock certificates hereunder, in cash. If such holder opts to redeem any number of shares of Preferred Stock pursuant to this Section 8(c)(ii), then the Corporation shall immediately redeem, from funds legally available therefor at the time of such redemption, such number of shares of Class B Convertible Preferred Stock then held by such holder, as requested by such holder. The redemption price shall be equal to the sum of (A) the aggregate of all accrued but unpaid dividends, plus (B) the number of shares of Class B Convertible Preferred Stock then held by such holder multiplied by (1) the average closing price of the Corporation's Common Stock for the five trading days immediately preceding the Delivery Date multiplied by (2) the Conversion Ratio calculated on the Delivery Date. If the holder has requested that the Corporation redeem shares of Class B Convertible Preferred Stock pursuant to this Section 8(c)(ii) and the Corporation fails for any reason to pay the redemption price referenced above within seven days after such notice is deemed delivered pursuant to Section 8(c)(ii), the Corporation will pay interest on the redemption price at a rate of 15% per annum in cash to such holder, accruing from such seventh day until the redemption price and any accrued interest thereon is paid in full. Nothing herein shall limit a holder's right to pursue actual damages for the Corporation's failure to deliver certificates representing shares of Common Stock upon conversion within the period specified herein (including, without limitation, damages relating to any purchase of shares of Common Stock by such holder to make delivery on a sale effected in anticipation of receiving certificates representing shares of Common Stock upon conversion, such damages to be in an amount equal to (A) the aggregate amount paid by such holder for the shares of Common Stock so purchased minus (B) the aggregate amount of net proceeds, if any, received by such holder from the sale of the shares of Common Stock issued by the Corporation pursuant to such conversion), and such holder shall have the right to pursue all remedies available to it at law or in equity (including, without limitation, a decree of specific performance and/or injunctive relief).

(iii) In addition to any other rights available to the holder, if the Corporation fails to deliver to the holder such certificate or certificates

pursuant to Section 8(c)(ii) by the Delivery Date and after the Delivery Date the holder purchases (in an open market transaction or otherwise) shares of Common Stock to deliver to the satisfaction of a sale by such holder of the shares underlying the Class B Convertible Preferred Stock which the holder anticipated receiving on the Delivery Date upon such conversion (a "Buy-In"), then the Corporation shall pay in cash to the holder (in addition to any remedies available to or elected by the holder) the amount by which (A) the holder's total purchase price (including brokerage commissions, if any) for the shares of Common Stock purchased for a Buy-In exceeds (B) the aggregate Conversion Price for the number of shares of Common Stock in the Buy-In for which such conversion was not timely honored. For example, if the holder purchases shares of Common Stock having a total purchase price of \$11,000 to cover a Buy-In with respect to an attempted conversion of \$10,000 aggregate Conversion Price for the number of shares of Common Stock in the Buy-In, the Corporation shall be required to pay the holder

6

\$1,000. The holder shall provide the Corporation written notice indicating the amounts payable to the holder in respect of the Buy-In.

(d) (i) In the event of any change in the number of issued and outstanding shares of capital stock of the Corporation by reason of any stock split, stock dividend, subdivision, merger, consolidation, recapitalization, combination, conversion or exchange of shares, or any other change in the corporate or capital structure of the Corporation which would have the effect of diluting or otherwise adversely affecting the rights and privileges of the holders of Class B Convertible Preferred Stock under this Section 8, the Conversion Ratio and Conversion Price in effect on the effective date thereof shall be adjusted so that the holder of any shares of Class B Convertible Preferred Stock shall be entitled to receive the number and type of shares of Common Stock or other securities of the Corporation which such holder would have owned or have been entitled to receive after the happening of any of the events described above had such shares of Class B Convertible Preferred Stock been converted into Common Stock immediately prior to the happening of such event or the record date therefor. An adjustment made pursuant to this Section 8(d) shall become effective (x) in the case of any such dividend or distribution to holders of shares of Common Stock entitled to receive such dividend or distribution, or (y) in the case of such subdivision, merger, consolidation, recapitalization, combination, conversion or exchange, at the close of business on the day upon which such corporate action becomes effective.

(ii) Except with respect to Excluded Securities (as defined below), in case the Corporation shall issue any shares of Common Stock or Common Stock Equivalents (as defined below) after the Issue Date at a price per share (or having a conversion or exercise price per share) of less than the Conversion Price per share (the "Adjusted Conversion Price"), in each such case the Conversion Price as in effect immediately prior thereto shall be reduced (but not increased) to the Adjusted Conversion Price and the Conversion Ratio shall be recalculated and increased (but not decreased) by dividing \$100.00 by the

Adjusted Conversion Price. Any adjustment made pursuant to this clause (ii) shall be made on the next business day following the date on which any such issuance is made and shall be effective retroactively to the close of business on the date of such issuance. For purposes of this clause (ii), the consideration receivable by the Corporation in connection with the issuance of additional shares of Common Stock or of Common Stock Equivalents since the Issue Date shall be deemed to be equal to (X) in the case the consideration received by the Corporation is cash, the sum of the aggregate offering price (before deduction of underwriting discounts or commissions and expenses payable to third parties, if any) of all such Common Stock and/or Common Stock Equivalents plus the minimum aggregate amount, if any, payable upon conversion, exchange or exercise of any such Common Stock Equivalents, and (Y) in the case the consideration received by the Corporation is other than cash, the fair market value of the consideration received by the Corporation as determined by the good faith judgment of the Board of Directors of the Corporation provided, however, that in the event the holder disagrees in good faith with the determination of the Board of Directors of the Corporation, such fair market value shall

7

be determined by a nationally recognized or major regional investment banking firm or firm of independent certified public accountants of recognized standing (an "Appraiser") selected in good faith by the holders of the Class B Convertible Preferred Stock; and provided, further, that the Corporation, after receipt of the determination by such Appraiser shall have the right to select in good faith an additional Appraiser meeting the same qualifications, in which case the fair market value shall be equal to the average of the determinations by each such Appraiser. Such adjustment shall be made whenever any such distribution is made and shall become effective immediately after the record date mentioned above. The issuance or reissuance of any shares of Common Stock or Common Stock Equivalents (whether treasury shares or newly issued shares) pursuant to a dividend or distribution on, or subdivision, combination or reclassification of, the outstanding shares of Common Stock requiring an adjustment in the Conversion Price and Conversion Ratio pursuant to this clause (ii) shall not be deemed to constitute an issuance of Common Stock or Common Stock Equivalents by the Corporation to which clause (i) of this Section 8(d) applies. Upon the expiration or termination of any unconverted, unexchanged or unexercised Common Stock Equivalents for which an adjustment has been made pursuant to this clause (ii), the adjustments shall forthwith be reversed to effect such Conversion Ratio as would have been in effect at the time of such expiration or termination had such Common Stock Equivalents, to the extent outstanding immediately prior to such expiration or termination, had never been issued. As used herein, "Excluded Securities" shall mean: (i) shares of Common Stock issuable upon conversion of the Class B Convertible Preferred Stock; (ii) shares of Common Stock issuable or issued to employees of or consultants to the Corporation pursuant to the Management Option Plan (as hereinafter defined); (iii) any capital stock issued as a stock dividend or upon any stock split or other subdivision or combination of shares of the Corporation's capital stock; (iv) shares of Common Stock issuable upon conversion of any Common Stock Equivalents outstanding on the Issue Date, (v) shares of Common Stock issuable

upon conversion of the Corporation's Class A Convertible Preferred Stock outstanding on the Issue Date or (vi) Common Stock issued upon the conversion or exercise of Common Stock Equivalents issued after the Issue Date as to which an adjustment to the Conversion Ratio has been made pursuant to this clause (d) upon the issuance of such Common Stock Equivalents. As used herein, "Common Stock Equivalents" shall mean securities convertible into, or exchangeable or exercisable for, shares of Common Stock of the Corporation. As used herein, the "Management Option Plan" shall mean the Corporation's 1992 Stock Option Plan, as amended.

(iii) If the Corporation shall set a record date for the holders of its Common Stock for the purpose of entitling them to receive a dividend or other distribution and shall thereafter, and before such dividend or distribution is paid or delivered to stockholders entitled thereto, legally abandon its plan to pay or deliver such dividend or distribution, then no adjustment in the Conversion Ratio or the Conversion Price then in effect shall be made by reason of the taking of such record, and any such adjustment previously made as a result of the taking of such record shall be reversed.

8

(e) (i) Unless sooner redeemed or converted in accordance with the provisions of Section 7 hereof or this Section 8 the outstanding shares of Class B Convertible Preferred Stock shall be subject to involuntary conversion at the option of the Corporation, at its sole discretion, in whole but not in part, at any time after six months after the Issue Date, for shares of the Corporation's Common Stock at the Conversion Ratio. The Corporation may effectuate such involuntary conversion on such date (the "Involuntary Conversion Date") provided that the following conditions have been met:

- (A) the Current Market Price (as hereinafter defined) of the Common Stock is equal to or in excess of one hundred and fifty percent (150%) of the Conversion Price for a period of at least ten (10) consecutive trading days; and
- (B) all of the shares of Common Stock into which the Preferred Stock is being converted have been registered under the Securities Act of 1933, as amended, and such registration has been declared effective by the Securities and Exchange Commission, and is effective on such date; and
- (C) the Corporation has a sufficient number of authorized shares of Common Stock reserved for issuance upon full conversion of the Class B Convertible Preferred Stock.

As used herein, "Current Market Price" shall mean for any day, the last sale price for the Common Stock on the principal securities exchange on which the Common Stock is listed or admitted to trading, or, if not so listed or admitted to trading on any securities exchange, the last sale price for the Common Stock on the National Association of Securities Dealers National Market System, or, if

the Common Stock shall not be listed on such system, the closing bid price in the over-the-counter market.

(ii) Notice of involuntary conversion of outstanding shares of Class B Convertible Preferred Stock shall be sent by or on behalf of the Corporation, postage prepaid, to the holders of record of outstanding shares of Class B Convertible Preferred Stock not less than ten (10) and not more than twenty (20) days prior to the Involuntary Conversion Date.

(iii) Notice having been so given as provided in clause (ii) above, from and after the Involuntary Conversion Date, unless default shall be made by the Corporation on the Involuntary Conversion Date in issuing the Common Stock issuable upon conversion of the Class B Convertible Preferred Stock pursuant to the Conversion Ratio, all rights of the holders of the shares of Class B Convertible Preferred Stock surrendered for conversion, except the right to receive the Common Stock in respect of such shares, shall cease and terminate. The involuntary conversion of the shares of Class B Convertible Preferred Stock for the Common Stock upon the Involuntary Conversion Date shall take place at the principal place of business of the Corporation.

9

On the Involuntary Conversion Date, the Corporation shall tender such Common Stock against receipt of the certificate or certificates representing the shares of Class B Convertible Preferred Stock being converted.

(iv) If any portion of the applicable redemption price under Sections 7 or 8 shall not be paid by the Corporation within seven (7) calendar days after the date due, interest shall accrue thereon at the rate of 15% per annum until the redemption price plus all such interest is paid in full (which amount shall be paid as liquidated damages and not as a penalty). In addition, if any portion of such redemption price remains unpaid for more than seven (7) calendar days after the date due, the holder of the Class B Convertible Preferred Stock subject to such redemption may elect, by written notice to the Corporation given within 30 days after the date due, to either (i) demand conversion in accordance with the formula and the time frame therefor set forth in Section 8 of all of the shares of Class B Convertible Preferred Stock for which such redemption price, plus accrued liquidated damages thereof, has not been paid in full (the "Unpaid Redemption Shares"), in which event the Conversion Price for such shares shall be the lower of the Current Market Price of the Corporation's Common Stock on the date such redemption price was originally due and the Current Market Price of the Corporation's Common Stock as of the holder's written demand for conversion, or (ii) invalidate ab initio such redemption, notwithstanding anything herein contained to the contrary. If the holder elects option (i) above, the Corporation shall within five (5) trading days of its receipt of such election deliver to the holder the shares of Common Stock issuable upon conversion of the Unpaid Redemption Shares subject to such holder conversion demand and otherwise perform its obligations hereunder with respect thereto; or, if the holder elects option (ii) above, the Corporation shall promptly, and in any event not later than five (5) trading days from receipt of holder's notice

of such election, return to the holder all of the Unpaid Redemption Shares.

(9) Upon any adjustment of the Conversion Price and the Conversion Ratio then in effect pursuant to the provisions of Section 8, then, and in each such case, the Corporation shall promptly deliver to each of the holders of Class B Convertible Preferred Stock a certificate signed by the President or a Vice President and by the Treasurer or an Assistant Treasurer or the Secretary or an Assistant Secretary of the Corporation setting forth in reasonable detail the event requiring the adjustment, the method by which such adjustment was calculated and the Conversion Price and Conversion Ratio then in effect following such adjustment. Where appropriate, such notice to the holders of Class B Convertible Preferred Stock may be given in advance. "

FIFTH: The foregoing Amendment of the Certificate of Incorporation of the Corporation was authorized by unanimous consent of the Board of Directors of the Corporation.

10

Signed on June 15, 1999.

/s/ Darby S. Macfarlane

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Darby S. Macfarlane  
Chairperson of the Board  
and Chief Executive Officer



OPINION OF PATTERSON, BELKNAP, WEBB & TYLER LLP

July 27, 1999

Chromatics Color Sciences International, Inc.  
5 East 80th Street  
New York, New York 10021

Dear Sirs:

We have acted as counsel to Chromatics Color Sciences International, Inc., a New York corporation (the "Company"), in connection with the proposed registration by the Company under the Securities Act of 1933, as amended (the "Act"), of 3,241,380 shares (the "Shares") of the Company's common stock, par value \$.001 per share (the "Common Stock"), pursuant to the Company's registration statement on Form S-3 (the "Registration Statement") filed with the Securities and Exchange Commission (the "Commission") on July 1, 1999.

In rendering this opinion we have examined the Company's Certificate of Incorporation and Bylaws, each as amended to date, and the minutes of the corporate proceedings taken by the Company in connection with the authorization of the Shares. We have also examined the originals, or copies certified or otherwise identified to us, of the corporate records of the Company, certificates of public officials and representatives of the Company, and such other documents and records, and have made such investigations of law, as we have deemed necessary for purposes of this opinion. We have assumed the genuineness of all signatures, the conformity to the original of all copies and the factual accuracy of all certificates submitted to us.

On the basis of the foregoing, we are of the opinion that the Shares have been duly authorized by all necessary corporate action on the part of the Company and when sold and delivered as contemplated by the Registration Statement will constitute duly authorized, validly issued, fully paid and nonassessable shares of Common Stock.

We express no opinion as to any laws other than the Business Corporation Law of the State of New York and the federal laws of the United States of America.

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

regulations of the Commission thereunder.

PATTERSON, BELKNAP, WEBB & TYLER LLP

By: /s/

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A Member of the Firm

cc: Ms. Darby S. Macfarlane

CONSENT OF INDEPENDENT CERTIFIED PUBLIC ACCOUNTANTS

Chromatics Color Sciences International, Inc.  
New York, New York

We hereby consent to the incorporation by reference in the Prospectus constituting a part of the Registration Statement on Form S-3 of our report dated March 15, 1999, except for Note 6, which is dated April 15, 1999, relating to the financial statements of Chromatics Color Sciences International, Inc. appearing in the Company's Annual Report on Form 10-K for the year ended December 31, 1998.

We also consent to the reference to us under the caption "Experts" in the Prospectus.

/s/ BDO Seidman, LLP

BDO Seidman, LLP

New York, New York  
July 23, 1999

CONSENT OF INDEPENDENT AUDITORS

We hereby consent to the incorporation by reference in the Prospectus constituting part of this Registration Statement on Form S-3 of our report dated February 17, 1998 appearing on page 53 of Chromatics Color Sciences International, Inc.'s Annual Report on Form 10-K for the year ended December 31, 1998. We also consent to the references to us under the headings "Experts".

/s/ WISS & COMPANY

WISS & COMPANY, LLP

Livingston, New Jersey  
July 21, 1999