



Not all gems come from under the ground.

The Gemological Institute of America® supports communities where gems are mined, working with the Nelson Mandela Centre of Memory to build libraries in Africa and helping artisanal miners understand the quality of their discoveries with our Gem Guide. These initiatives help make it possible for regional populations to take a more active role in the industry and ultimately help their community look forward to a brighter future. Our contributions are one of the many reasons why GIA® is the world's foremost authority on diamonds, colored stones and pearls.

Learn more about the many facets of GIA at GIA.edu



The World's Foremost Authority in Gemology™ Ensuring the Public Trust Through Nonprofit Service Since 1931

BENEFICIATION EDUCATION INSTRUMENTS LABORATORY RESEARCH



BOARD OF DIRECTORS

PRESIDENT Jeffrey Bilgore Jeffrey Bilgore, LLC

VICE PRESIDENT Bruce Bridges Bridges Tsavorite

Pramod Agrawal Shanu G., Inc.

SECRETARY Shekar Shah Real Gems, Inc.

Treasurer Avi Raz A&Z Pearls, Inc.

DIRECTORS

Charles Carmona
Guild Laboratories

Kimberly Collins
Kimberly Collins Colored Gems

Jonathan Gad GAD Enterprises

Bill Heher Rare Earth Mining Co., Inc.

Gina Latendresse American Pearl Company, Inc.

> Kusam Malhortra K&K International

Jeff Mason Mason-Kay, Inc.

David Nassi 100% Natural

Hemant Phophaliya AG Color, Inc.

Simon Watt Mayer & Watt

PAST PRESIDENT Ruben Bindra B&B Fine Gems

CHIEF EXECUTIVE OFFICER

Douglas K. Hucker

American Gem Trade Association

MEMBERSHIP BENEFITS

The American Gem Trade Association is a not-for-profit association of United States and Canadian gemstone professionals dedicated to promoting awareness and appreciation of natural colored gemstones and cultured Pearls.

Founded in 1981, the AGTA has over 1,300 members representing leading colored gemstone and cultured Pearl wholesalers, retailers, manufacturers, designers, colored Diamond dealers, estate dealers and industry professionals.

AGTA Members are proud to uphold the highest ethical standards, agreeing to the Association's strict Code of Ethics and full disclosure of gemstone enhancements.

Membership provides you with many exclusive benefits and services: Members are eligible to exhibit at some of the most important annual events in the gemstone and jewelry industry, including AGTA GemFair™ Tucson, AGTA GemFair™ Las Vegas, and AGTA Pavilion at the JA New York Summer Show.

Members are featured in the AGTA Source Directory, both the printed and online versions. This is a powerful tool that gives access to a valuable network of fellow gemstone professionals.

Members stay informed about the AGTA, hot topics surrounding our industry, gemstone and jewelry fashion with the quarterly *Prism* & weekly *ePrism*.

Members have access to leading industry programs. These programs include Bank of America Merchant Services, FedEx Express®, FedEx Declared Value, FedEx Office, Association Health Programs and car rentals with Avis and Budget.

Members can also access our AGTA Online Community and gain valuable knowledge from our AGTA GemFair™Tucson Seminar USBs and eLearning Platform.

The professionalism of AGTA Members continues to set them apart from the competition.

Prism: For further information or to advertise, please contact: American Gem Trade Association 3030 LBJ Frwy., Ste. 840, Dallas, TX 75234

T: 800-972-1162 F: 214-742-7334 info@agta.org www.agta.org www.addmorecolortoyourlife.com @agta_gems



COVER: Tricia Helfer

Necklace: Llyn Strong, Llyn Strong Fine Art Jewelry – 18K yellow gold clasp Lapis Lazuli necklace featuring an 30.90 ct. boulder Opal accented with black Diamonds, tsavorite, Rubies and Sapphires. Earrings: Lindsay Jane, Lindsay Jane Designs – Platinum "Butterfly" earrings featuring detachable drops of boulder Opal (39.92 ctw.) accented with Zoisites, Diamonds and Paraiba Tourmalines. Ring #1: Victoria Tse, VTse, Inc. – 18K white gold ring featuring a 33.41 ct. harlequin Australian black Opal accented with baguette Diamond pave and Diamond melee. Ring #2: Michael Endlich, Pave Fine Jewelry – Platinum "Deep Lagoon" ring featuring an 8.33 ct. Tourmaline accented with Diamonds. Clothing: Theia – Navy Jumpsuit. Photographer – Brian Bowen Smith for Copious Management. Producer and Fashion Stylist – Tod Hallman for THPFashion Inc.. Hair – David Keough for Art Dept Makeup – Desirae Cherman for Exclusive Artist. Manicurist – Carla Kah

FROM THE CEO

DOUGLAS K. HUCKER



SINCE ITS INCEPTION, THE AMERICAN GEM TRADE ASSOCIATION HAS COME TO represent many things to its members and the trade at large. Unparalleled group of the finest and most comprehensive gemstone traders, pioneer and protector of ethical trade in gemstones, reliable source of gemstone education, and producer of the AGTA Spectrum Awards™, the most prestigious colored gemstone and cultured pearl jewelry design competition in our industry.

But arguably, what our members

and the industry most commonly recognize as the face of the AGTA is our AGTA GemFairs, our flagship show in Tucson and our AGTA GemFair™ Las Vegas. Our trade shows are universally recognized as must-attend events for anyone who loves and appreciates gemstones and understands the importance that colored gemstones play in the success of the jewelry industry today.

As with other shows in our industry, the AGTA recognizes the importance of maintaining and improving the "experience" of our tradeshows for both exhibitors and clients. We have worked diligently over the years to constantly analyze how we can improve on that experience. We know how the comfort of our venues, the presentation of educational and networking opportunities, the quality of food and the enjoyment of evening social events all work to make attending our shows a quality experience.

What we have never lost sight of, however, is the fundamental reason you attend GemFair; profitability. At AGTA GemFair™ Tucson and AGTA GemFair™ Las Vegas you become part of a community, made up of the most expert and reliable gemstone traders there are. These traders, our members, have for decades travelled the world to source the finest of gem materials and are committed to providing you with the assurance that they have been ethically sourced, and that all information that you need to make an informed buying decision is clearly presented. Our members are not there to sell you a gemstone, they are there to bring you into a community of gemstone lovers that want to work with you to make you successful now and for years to come.

The finest inventories, competitively priced, provided by traders who are as committed to ethics and professionalism as you are. They are here for you today and will be there for you tomorrow and beyond.

One of the most common sentiments I hear our attendees express is that GemFair "is my favorite and most profitable trade show." If you are a regular attendee at GemFair you know why. If you have not yet experienced GemFair we will welcome you with open arms and let you experience for yourself what makes GemFair a growing, vibrant show while other shows across the globe are experiencing declines.

We will continue to make both our GemFairs an enjoyable and profitable experience for you and we have exciting new developments in both shows.

AGTA GemFair[™] Tucson New Commitment to Designer Jewelry (February 5 – 10, 2019)

AGTA GemFair Tucson will remain the industry's most important event for gemstones and cultured pearls and colored gemstone jewelry. We have listened to our attending buyers, who have expressed a desire to see even more colored gemstone designer jewelry. In response, we have completely remodeled the Grand Ballroom at the Tucson Convention Center to provide an elegant new home for our expanded group of designer jewelers. The Grand Ballroom will feature over forty of the most creative designers working with colored gemstones and cultured pearls today. This is a perfect place for you to experience the newest and most striking directions in designer jewelry, all focused on colored gemstones.

Join us February 5th through the 10th, 2019. It's the same amazing inventory, beautiful weather and wonderful food you have come to expect, and now with dozens of new designers and loose gemstone traders it will continue to be your most profitable tradeshow experience.

AGTA GemFair[™] Las Vegas Moves to a New Home-The Las Vegas Convention Center (May 31 – June 4, 2019)

Next year, in 2019, the AGTA GemFairTM Las Vegas will be in a new venue at the Las Vegas Convention Center during dates that are concurrent with the Couture Show and the JCK Las Vegas show. We are excited to be teaming up with the Las Vegas Antique Jewelry and Watch Show and the new Premier Show, anchored by the VICENZAORO. Our move to the LVCC will provide our attendees with the largest group of AGTA gemstone traders outside of Tucson, with over 200 exhibitors representing the finest and most trustworthy dealers, allowing you to continue to shop with confidence with the dealers you have come to know and trust.

Our move to the LVCC will create a synergy with the Estate and Antique dealers and the Premier exhibitors, all under one roof and in one hall. We fully understand how valuable your time is, and to make it as efficient for you as possible, we will be running shuttles from all the other show venues to and from the LVCC. And, if you prefer, we will be providing complimentary Uber rides to and from the LVCC from the other venues!

Make your plans now to attend both great events. Housing and registrations for both events is available at www.agta.org/shows or simply contact us at the office at 800-972-1162 and we will provide you with whatever assistance you need. I look forward to seeing you all in 2019 and helping you to make your businesses in 2019 the most successful ever.

Sincerely,

Douglas K. Hucker Chief Executive Officer



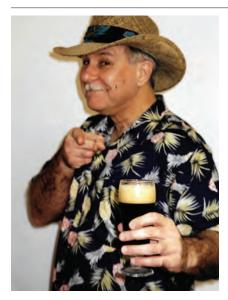


Exceptional Spinel

AGTA Gemfair Las Vegas - Booth 305 T AGTA Gemfair Tucson - Booth 501

info@bandbfinegems.com | 800.662.8440

FIRM MEMBER PROFILE DAVID A. BRACKNA, GEMCUTTER



n January of 2018, I contacted someone I have fond memories of seeing in Tucson year after year, David Brackna. While I have seen David around for many years and had numerous conversations regarding gem cutting, this was really the extent of our interactions. In our industry, it seems we see someone once or twice a year for maybe 5-10 minutes. We always think to ourselves that we need and want to take the time to become better acquainted and often do not. One of the ways I have become better acquainted with some is by writing the AGTA member profiles.

At the beginning of 2018, I contacted David Brackna to conduct this interview, he informed me that he had medical concerns and was "in treatment." He did say that he would answer the AGTA questionnaire and return it to me upon feeling better. This, however, was not to be. David passed away May 21, 2018.

The questionnaire was recently returned to me by his wife, Mary Ann, through a rather circuitous route through multiple AGTA member's hands.

In Dave Brackna's own words, "I am truly honored that the AGTA Prism publication wants to do a profile on me."

Tell us the fascinating story of how you got your start in the jewelry industry. With the help of fellow karate guy, Jay Semmes, a fellow gem cutter from Georgia. I bought my wife's engagement ring from him. I started buying colored gemstones from him and figured I could make more money by cutting them myself.

Tell us about the person who introduced you to the jewelry industry and about your love for colored gemstones. Jay Semmes and Gem Dealer, Alex Bahtiarian, an AGTA Charter member, were the first to memo me colored gemstones. I sold them (wrapped in toilet paper) during lunch while (somewhat) working for the D.C. government.

Who were your early mentors in life? Korean martial arts grandmaster, Ki Whang Kim, was my original karate instructor. (David reached the 8th degree black belt – 50 years of training).

What is your favorite gemstone? Hard to say – there are so many!

As a gem cutter, whose cutting or carving do you admire? Michael Dyber, Ledge Art Studio, in New Hampshire, no question. A brilliant, quiet man.

What attracted you to AGTA?

The individualistic attitudes of the founding members. Who wouldn't like a group assembling in a parking lot to organize what is now AGTA?!

Please share your thoughts on social responsibility in the colored gemstone industry.

Be honest, leave something on the table so that everyone can make a little money.

What has your membership with the AGTA meant for/to you? Its integrity for the industry.

What is your favorite colored gemstone "AGTA Tucson Story" that has happened to you over the years?

Sorry.....it can't be printed!

What is your favorite city? Tombstone, Arizona. Visiting Tombstone after AGTA Gem-FairTM Tucson and just relax. It is also my favorite off-the-beaten path destination.

Favorite hotel in the world? My own bed.

What is your favorite restaurant? G & M Seafood, just outside of the Baltimore airport.









2nd **Place** | *Business Daywear* Opal, Paraíba Tourmaline and Diamond Pendant

Platinum Honors | *Men's Wear* Sapphire and Diamond Platinum Cufflinks

We are Honored to Announce our 2018 AGTA Spectrum Award Winners!





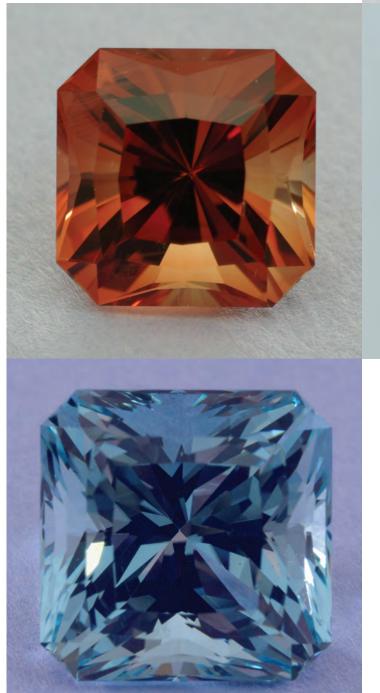
What was your best dinner ever? Chesapeake Bay Crab Imperial, I cooked it myself!

Tell us something about yourself that most people do not know.

I proposed, along with Ray Zajicek, the "AGTA's Cutting Edge, Colored Gemstone Cutting Competition" that is now part of The AGTA Spectrum Awards™ Competition.

By David M. Baker, G.G., Membership and Education Manager







Top: Quartz, inverse pyramid *MIddle left to rignt:* Sunstone, ash square; Umba Rhodolite Garnet *Bottom:* Aqua, ash square



2018 AGTA SPECTRUM AWARDS™ JUDGES

The AGTA Spectrum Awards™ are the world's premier colored gemstone and cultured Pearl jewelry design competition with categories in Bridal

Wear, Business/Day Wear, Classical,
Evening Wear and Men's Wear. AGTA
Spectrum Awards™ also feature the Platinum Honors™, sponsored by Platinum Guild
International, and the Gem DIVA Awards™,
sponsored by the Women's Jewelry Association
(WJA). The AGTA Cutting Edge Awards™
honor loose, colored gemstones in everything
from Classic Gemstones to one-of-a-kind
Carvings, Pairs, and Suites, as well as Objects
of Art. The entries undergo a rigorous judging

procedure, with finalists being scored separately by each judge, then compiled to discover the winning scores for each category.

The respected judges (from left to right) for the competition this year were: Darryl Alexander, Alexanders Jewelers; Randy Coffin, Coffin &

Trout Jewellers; Dallas Prince, Dallas Prince & Company, Andre Hahn, Vielle Jewelers, LLC; and Pieter Hye, Pieter Andries Jewelers.

"Our AGTA Spectrum Awards each year are truly defined by the chemistry and camaraderie of the judges. This year we had an exceptional team. For five unique individuals to come together and reach consensus on perhaps 50 winners out of 450 entries requires uncommon expertise and the ability to give as much credence to the opinions of other's as

you do your own. Our sincere gratitude to the judges for a job superbly done!" said Douglas Hucker, CEO, American Gem Trade Association.



THE BEST OF THE BEST," Pieter Hye, Pieter Andries Jewelers

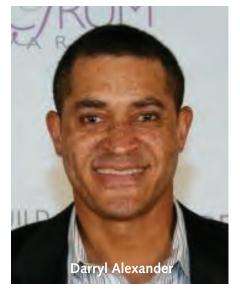
Darryl Alexander, Alexanders Jewelers

Darryl Alexander's passion for design started at a young age and thankfully for the rest of us who enjoy the unique, the special and the magic that can only be created by a master gem cutter, Darryl took advantage of his teachings, took them to new levels and has never been afraid to create outside of the box!

Darryl began his design career with clothing but soon discovered gems and jewelry were really meant for him and 30 years later, Darryl is a multiple award-winning gem cutter, carver, miner and jewelry artist. Darryl's resume is an impressive one which includes crafting jewelry for the famed Borsheim's in Omaha, Nebraska, where he learned many new techniques and found a love of cutting rough into fabulous gems to be treasured in jewelry pieces for clients around the world. Darryl's work has been featured in publications such as *Modern Jeweler, Professional Jeweler, Lapidary Journal* and *Vogue*.

Darryl is the proud winner of five Gemmy Awards, five AGTA Cutting Edge Awards[™], five American Pearl Awards, three Arizona Jewelry Design Awards and two Headley-Whitney Bibliot Awards as well as being a featured artist at the Lizzardo and Headley-Whitney Museums.

Darryl resides in Arizona and has been married to wife, Linda for 26 years with seven beautiful children. He credits his success to his mom and dad who he says always encouraged him to be what he dreamed to be, and to his wife, who has stood beside him through all of life's joys and challenges. You can see more of Darryl's work on Facebook at Darryl Alexander, Alexander's Jewelers.





Randy Coffin, Coffin & Trout Jewellers

Starting in the business right out of high school, Randy quickly developed a passion for designing and creating beautiful jewelry while working for an independent custom jeweler. In 1984, with his business partner Dave Trout, the two opened their first retail store with the goal of establishing themselves as the premier custom jeweler in Arizona. They quickly became known for their unique designs utilizing only the highest quality gemstones and the upper echelon of craftsmanship. Between Randy Coffin and Dave Trout, Coffin & Trout has been awarded a combination of fourteen AGTA Spectrum AwardsTM, Platinum Honors, and International Cultured Pearl Association awards; in addition to Dave Trout's award-winning Gent's Pagoda ring being in the permanent collection of the Smithsonian Museum of Natural History.

As an Arizona native, Randy serves his local community by participating in many charity events and serving on the board of the Tempe Diablos, most recently as the President of the Board. After the passing of Dave Trout in 2009, Randy decided the best way to honor his friend was to create a charity bestowed with his name, which was founded the summer of 2009. The mission of the Dave Trout Charities has always been to fund child-based charities focused on atrisk youth and children in need.

Randy's design approach always begins with a beautiful gem which fuels creative ideas and sparks a new design. The satisfaction that he derives from designing and delivering Coffin & Trout limited edition



pieces and seeing the delight that his customers have from owning them is what gives him joy and fulfillment.

Andre Hahn, Vielle Jewelers, LLC

Andre Hahn was born in Sao Paolo, Brazil to German immigrants, who immigrated to the United States in 1967. Hahn began working with his father, a jeweler and jewelry designer by trade, as a teenager, learning all aspects of fine jewelry making and design. He worked in several jewelry shops in New York, servicing high-end retailers.

In 1985, he joined Krementz & and Co. as a jeweler, eventually assuming responsibility for all corporate model-making. He worked closely with longtime AGTA member Richard Krementz, Jr., where he learned about fine colored gemstones and how to incorporate them into fine jewelry.

Hahn has been the owner of Vielle Jewelers, LLC since 2002. Located in Midtown Manhattan, Vielle is a high-end contract jewelry manufacturer for the finest retailers, and colored gemstone and diamond dealers in New York City. His specialty is helping clients execute their designs to reality and contributing expertise in design interpretation and fabrication.

Pieter Hye, Pieter Andries Jewelers

Pieter Andries Hye, a native of Belgium, began his career in the jewelry industry working in the Hye family business in Antwerp. As a gemologist and master goldsmith, he wore many hats in the business – sales, management, designer, goldsmith, and diamond and gem buyer. Hye was honored to receive several international design awards, along with special commissions from Sheiks, Emirs, Heads of State, and even Belgium royalty.

In 1982, Hye came to the United States, eventually settling with his wife, Marie-Helene and their three children, in the Dallas-Fort Worth, Texas area. With the inception of HP Creations, Creators of Fine Jewelry, he was designing and manufacturing for Harry Winston, H. Stern, Tiffany & Co., Saks Fifth Avenue, and Corrigan's to name a few. Within ten years, Hye opened his first retail store, Pieter Andries, in Westlake, Texas, selling his own brand and creations, and developing a one-of-a-kind, full service jewelry experience for his clientele.

Hye, who also holds the prestigious title of Certified Gemologist Appraiser from the American Gem Society (AGS), is a huge proponent of education and serves as a mentor and educator to his staff. With in-house training in gemology and diamond grading, to presentation techniques and business skills available to his staff, he also sends staff







to GIA and AGS Conclave for continuing education programs.

Hye is a vital part of the jewelry community, serving as a long-time member of AGTA and AGS, as well as MJSA, the Jewelers Board of Trade, the Jewelers Vigilance Committee and the Jewelers' Security Alliance. His dedication to service extends to his home community as well as a member of many business, service and charitable organizations. Besides his passion for his family, community and the jewelry industry, Hye enjoys mentoring young people and those less fortunate. In his words, "retirement is not an option; it is an obligation to transfer knowledge, wisdom and to continue to educate and share with those that are willing to learn."

Dallas Prince, Dallas Prince & Company

As a published artist, Dallas Prince has been creating works of art in many unique mediums for the past 36 years. Her background includes an extensive career as a Creative Art Director in print and film, a News & Sports Anchor in broadcast, an on-air Host in television entertainment, and finally, a Jewelry Designer in the Home Shopping industry. It was in this new emerging marketplace of television and online shopping where her creativity and artistry merged to become a passion for designing jewelry. Jewelry has proven the ultimate three dimensional medium and each design echoes the same elegant sense of beauty as her paintings.

Dallas is known as "Vintage with an Edge" and has spent over 18 years creating jewelry for the television shopping industry in four countries where she personally appears for each and every show. Her namesake line, Dallas Prince Designs, features vintage styling, hand applied artistry, visionary mountings and exotic gemstones. Good fortune was bestowed upon Dallas as a multiple award-winning designer that has propelled her brand beyond television into the brick and mortar retail arena. That recognition gave her the confidence to elevate her business into the luxury level of jewelry design.

Based in Los Angeles, Dallas works with her husband, Vincent Ciurluini, a Graduate Gemologist who has also contributed to their list of award-winning designs. Of their 23 year marriage, 18 of those were spent creating their own love affair with the jewelry industry. While Dallas continues to design for her faithful television fans, as well as, a growing list of celebrity and social clientele, she remains committed to her unforgettable journey of design.



2 0 1 8

The 2018 AGTA Spectrum Awards ™ and AGTA Cutting Edge Awards™ are a showcase of individual creativity featuring new and seasoned talent with an exciting mix of innovation and tradition.

These winners — and all our participants — help promote the beauty and appeal of colored gemstones and cultured pearls.

We are proud to present this year's winning entries — and extend our



BEST OF SHOWJoseph Ambalu, Amba Gem Corp.
Platinum and 18K yellow gold ring featuring a 7.16 ct. untreated Russian Emerald accented with Diamonds.

BEST OF...

A. Best Use of Color Ricardo Basta E. Eichberg, Inc.

18K yellow gold
"Phoenix Rising"
necklace featuring
Mandarin Garnets
(28.04 ctw.) accented
with Paraiba
Tourmalines
(1.55 ctw.), Sapphires
(4.68 ctw.), Rubies
(3.17 ctw.), fire Opals
(1.35 ctw.), tsavorite
Garnets (.02 ctw.) and
a .77 ct. Turquoise.

B. Editors' Choice Caroline Chartouni Caroline C

18K white gold ring featuring a 4.50 ct. blue Spinel accented with Diamonds (2.98 ctw.).



BEST OF...



BEST OF...

E. Fashion Forward Patrick King Jewelsmith, Inc.

14K white and rose gold pendant featuring a 13.31 ct. Sapphire accented with Sapphires (.98 ctw.) and Diamonds (2.91 ctw.).

F. Best Use of Platinum and Color Deirdre Featherstone Featherstone Design Platinum "Wood

Platinum "Wonder Woman" cuff featuring Aquamarines (4.54 ctw.), Tanzanites (2.44 ctw.), blue Zircons (1.60 ctw.), lavender Spinels (.46 ctw.), Tourmalines (.68 ctw.) and star-set Diamonds (2.64 ctw.).



Importer of Fine Gems 1-800-545-9555



AGTA GemFair Tucson Booth #911



AGTA GemFair **Las Vegas**

bring it to life

your image, your designs, your sales

High Quality Single Stones, Matched Pairs, and Suites























VIEW OUR INVENTORY OF FINE GEMS ONLINE www.gem2000.com







BRIDAL WEAR

A. 1st Place Zoltan David Zoltan David 22K and 18K rose gold necklace featuring a 46.12 ct. Opal accented with a 3.60 ct. round Opal and blue Sapphires (2.40 ctw.).

2nd Place Ricardo Basta E. Eichberg, Inc. Platinum "Take the Plunge" ring featuring a 21.86 ct. oval Tanzanite cabochon accented with Diamonds (2.13 ctw.).

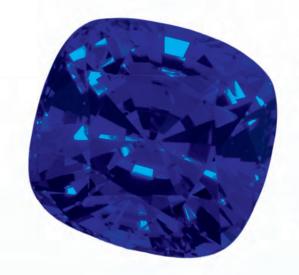
B.

C. 3rd Place Niveet Nagpal Somewhere In The Rainbow

Platinum and black rhodium "Hi, I'm Alex And You Are?" ring featuring a 6.12 ct. Alexandrite cabochon accented with Alexandrite and Diamond melee.



A. Kleiman & Co.







Natural and Untreated

415-982-3500

Tucson AGTA #622

Las Vegas AGTA #411

BRIDAL WEAR

D. WJA Gem DIVA™ Award Beatrix-Laura Jessner B & W Jewels

Platinum earrings featuring triangular Aquamarines (7.37 ctw.) accented with trapezoid and shield-cut Diamonds (3.47 ctw.).

E.
Entry Platinum
Innovation
Michael
Jakubowski
Gem Fanatic
Platinum ring featuring a
3.88 ct. gray cushion-cut
Spinel accented with
Diamonds (1.03 ctw.).







John Ford is an 8 time Spectrum Award winning designer, manufacturer of black opal jewelry and importer of loose opals.

AGTA Gem Fair Tucson Booth 427







LightningRidgeCollection.com

(409)771-7750

BRIDAL WEAR

F. Honorable Mention Heath London Heath London Jewelry

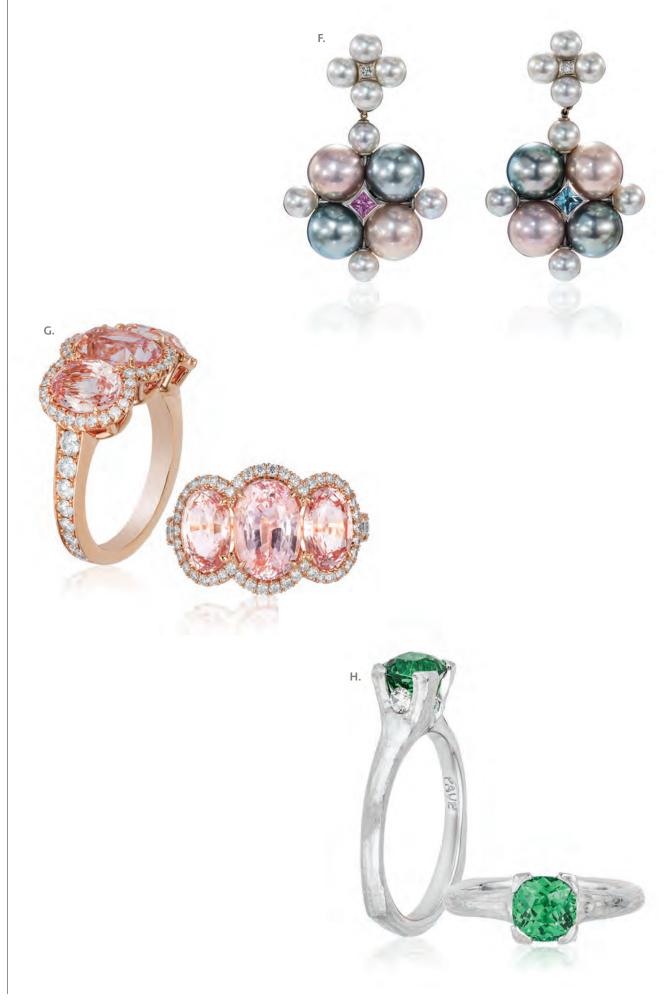
18K gold and aluminum earrings featuring Tahitian, freshwater and Akoya cultured Pearls accented with a .40 ct. Aquamarine, a .40 ct. pink Sapphire and Diamonds (.60 ctw.).

G. Manufacturing Honors Niveet Nagpal Omi Prive

18K rose gold ring featuring three Padparadscha Sapphires (7.17 ctw.) accented with Diamonds (.88 ctw.).

H. Platinum Honors™ Michael Endlich Pave Fine Jewelry Platinum "Green Valley" ring featuring a 1.22 ct. tsavorite Garnet accented with

Diamonds (.13 ctw.).





Exquisite collection of fine quality Tanzanite

10-Time Winner AGTA Spectrum Award















AG COLOR INC. AG DIAJEWELS INC.

Sept. HK Show AWE Hall 8 G02

17 E 48th STREET • SUITE 701 • NEW YORK, NY 10017
TEL: (212) 207-3905 FAX: (212) 207-4877 • TOLL FREE: 1-866-4AG COLOR
WEBSITE: www.agcolor.com • EMAIL: HEMANT@AGCOLOR.COM

BUSINESS/DAY WEAR

A.
1st Place
Erica Courtney
Erica Courtney, Inc.
18K yellow gold "Emerald City" necklace
featuring a 105.99 ct.
pear-shaped Emerald
accented with Diamonds (4.42 ctw.).



TIM ROARK INC.

OFFERING QUALITY AND VALUE SINCE 1974



TUCSON BOOTH #1309 LAS VEGAS BOOTH #504

ATLANTA, GA

WWW.TIMROARKINC.COM 404-872-8937

HOPKINS OPAL

EXCEPTIONAL AUSTRALIAN OPAL

LIGHTNING RIDGE BLACK OPAL CRYSTAL OPAL • BOULDER OPAL

AGTA GEMFAIR TUCSON BOOTH # 1506 AGTA GEMFAIR LAS VEGAS BOOTH # 108







BUSINESS/DAY WEAR

B. 2nd Place Niveet Nagpal Omi Prive

Platinum and 18K rose gold pendant featuring a 9.39 ct. pear-shaped black Opal accented with Paraiba Tourmalines (.90 ctw.) and a .25 ct. pear-shaped Diamond.

C.
Manufacturing
Honors
Michael Tope
Raintree, LLC
Platinum and 18K rose
gold ring featuring a
3.74 ct. Aquamarine
accented with a .241

ct. Ruby.

D.
3rd Place
Beatrix-Laura
Jessner
B & W Jewels
18K white gold reversible earrings featuring
pink Sapphires (2.71
ctw.) and Diamonds
(3.84 ctw.).





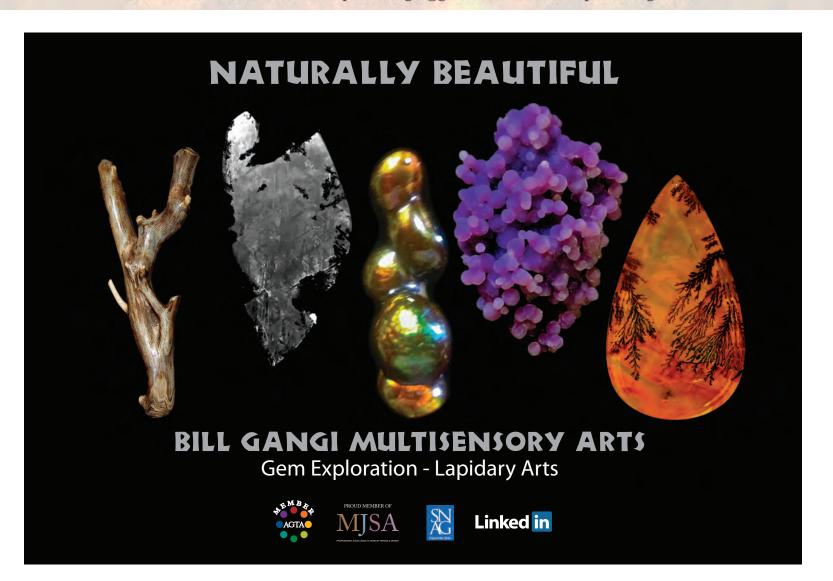


Sunrise Yellow Zircon Golden Imperial Dopaz Sage Green Dourmaline Tuscan Yellow Sapphire Heavenly White Diamonds Sunset Rose Gold



2019 AGTA Tucson GemFair Booth #3000

DPCO USA 310.625.0200 dallasprincedesigns@gmail.com www.dallasprincedesigns.com



BUSINESS/DAY WEAR

E. Entry Platinum Innovation Joseph A. Murawski Joden World Resources, LLC Platinum earrings featuring round brilliant cut Diamo

Platinum earrings featuring round brilliant cut Diamonds (1.44 ctw.) surrounded by 10mm round black Onyx.

F. WJA Gem DIVA™ Award Belle Brooke Barer Belle Brooke

18K royal yellow gold pendant featuring a 3.74 ct. pear-shaped indicolite Tourmaline accented with Diamonds (.18 ctw.).

G. Platinum Honors™ John Ford Lightning Ridge Collection by John Ford

Platinum necklace featuring a 10.67 ct. black Opal accented with Diamonds (1.07 ctw.).

H. Honorable Mention Bella Campbell Campbellian Collection / BHI

8K white gold
"Phoenix Feathers"
earrings featuring
Mexican fire Opals
(2.19 ctw.) accented
with Rubies (4.93
ctw.) and Diamonds
(.56 ctw.).





IF YOU DREAM IN COLOR

Kris Gem

IS YOUR REALITY

Est. 1992



CLASSICAL

A. 1st Place Niveet Nagpal Omi Prive

Platinum ring featuring a 10.23 ct. cuprian Tourmaline accented with Diamonds (2.57 ctw.), Paraiba Tourmalines (1.54 ctw.) and a .01 ct. Alexandrite.

B. 2nd Place Joseph Ambalu Amba Gem Corp.

Platinum and 18K yellow gold ring featuring a 7.16 ct. untreated Russian Emerald accented with Diamonds.

C. 3rd Place Swapna Pinnamaneni Dream Choice Jewelry

18K yellow gold "The Dancer" brooch featuring a 2.75 ct.
Tanzanite accented with yellow Diamonds (2.75 ctw.), Rubies (14.36 ctw.) and white Diamonds (1.41 ctw.).





Wholesalers of Tahitian, South Sea, Keshi and Akoya Pearls T:(213)612-0252 E:sales@continentalpearl.com WWW.CONTINENTALPEARL.COM JAPAN • USA • CANADA • THAILAND

D. Honorable Mention John Ford Lightning Ridge Collection by John Ford

Platinum necklace featuring black Opal cabochons (38.43 ctw.) accented with Sapphires (.95 ctw.), tsavorite Garnets (.95 ctw.) and Diamonds (6.76 ctw.).

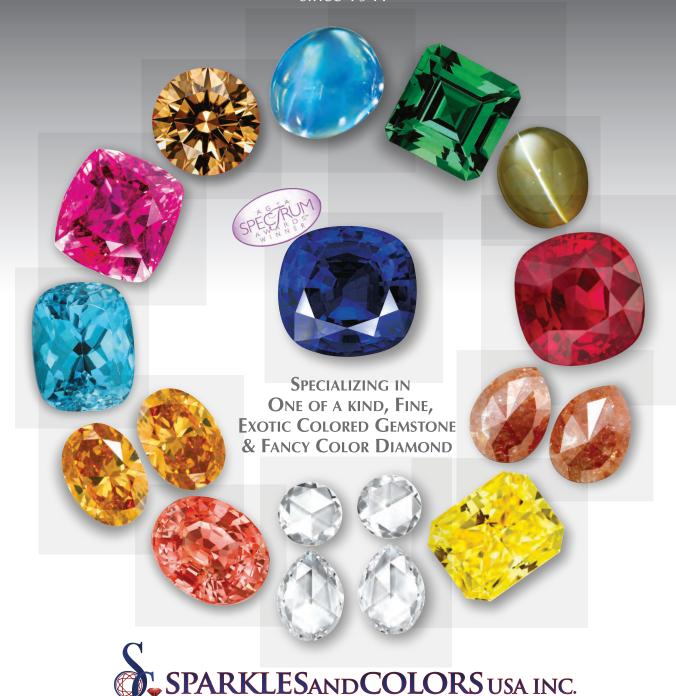
Manufacturing Honors and WJA Gem DIVA™ Award Lindsay Jane Lindsay Jane Designs

Platinum ring featuring a 6.78 ct. bicolored Sapphire accented with French-cut Diamonds (1.84 ctw.), brilliant-cut Diamonds (.44 ctw.) and Sapphires (.06 ctw.).

Platinum Honors[™] Benjamin Javaheri Uneek Jewelry, Inc Platinum ring featuring a 6.53 ct. oval blue Sapphire accented with Diamonds (1.39 ctw.).



Lakhi Gems Group



62 West 47th Street, Suite 1609, New York, NY 10036 PHONE: 212.944.7575 • FAX: 212.944.7576 • E-MAIL: sc@lakhi.net www.LAKHI.net • www.LAKHIGEMSGROUP.com

Single stones, matched pairs, Layouts, calibrated parcels in:

- Natural Fancy color diamonds
- Rose cut diamonds White, Champagne, Natural Fancy color and Black color
- Rustic diamond and Slices
- Black diamond

Non-heated and heated - Single stones, matched pairs, Layouts, calibrated parcels in :

- Sapphires from Ceylon, Madagascar, spl. in Burma & Kashmir
- Ruby from Burma, Tanzania, Mozambique, Madagascar
- Emerald from Colombia, Zambia, Brazil
- Fancy Sapphire Yellow, Pink, Lavender, Padparadscha and many other Exotic Semi-precious Stones

Please visit us at the following shows:

AGTA/GJX Tucson • MIAMI Antique • JA New York • BASELWORLD Hong Kong Fair March/June/Sept. • Bangkok Gems & Jewelry Fair March/Sept.











EVENING WEAR

A. 1st Place Gross & Currens David Gross Group

Platinum ring featuring a 20.26 ct. cushion-cut unheated yellow Sapphire accented with Diamonds (3.60 ctw.).

B. 2nd Place Susan Helmich Somewhere in the Rainbow

18K white and yellow gold "Le Dauphin" necklace featuring a 101.85 ct. Aquamarine accented with Diamonds (1.34 ctw.).











Breathtaking Color

Blue Sapphire, Padparadscha, Fancy Sapphire, Ruby

AGTA GemFair Tucson Booth 316 JCK Show Las Vegas AGTA GemFair Booth 809

650 South Hill Street, Suite 916 Los Angeles, California 90014 info@bluesapphirestones.com

www.BlueSapphireStones.com





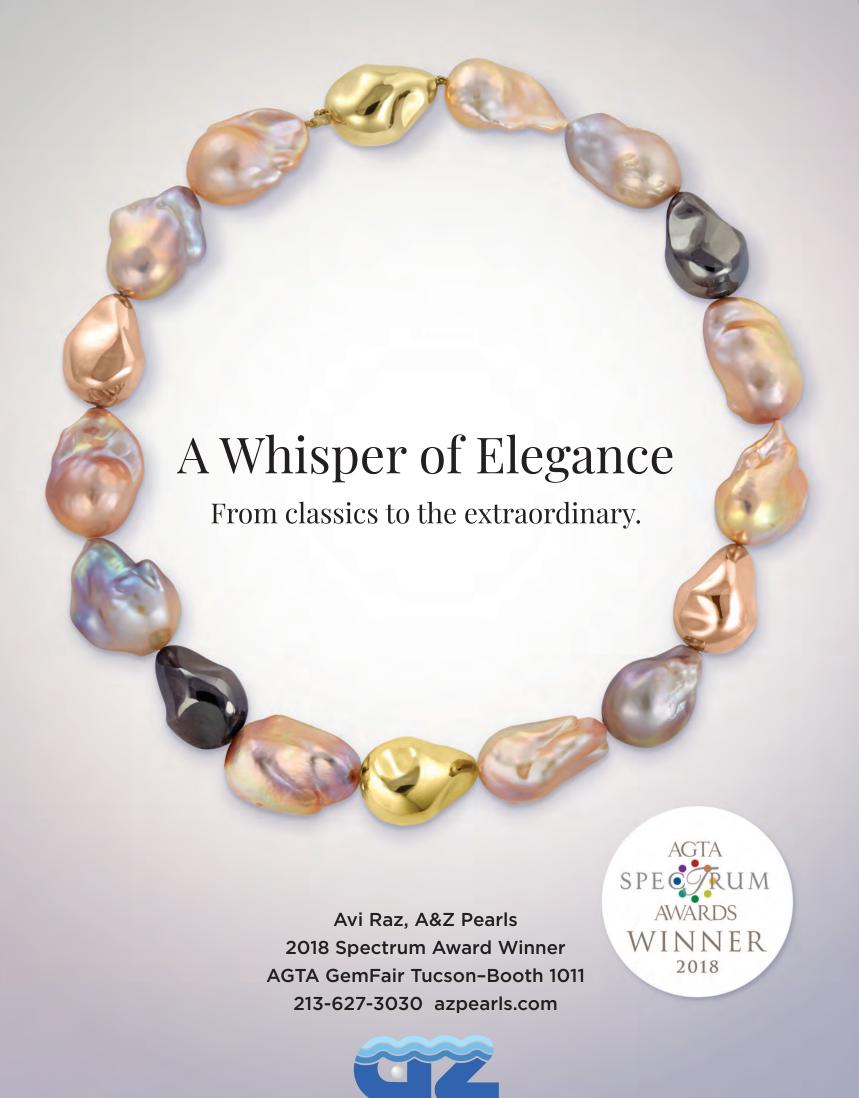
EVENING WEAR

C. 3rd Place Zoltan David Somewhere In The Rainbow

Platinum and palladium "Candy on Ice" necklace featuring rubellite Tourmalines (83.00 ctw.) accented with Diamonds (5.97 ctw.).

D.
Entry Platinum
Innovation
Jacob Wosinski
Jacob Raymond
Custom Jewelry
Platinum ring featuring
a 2.11 ct. blue
Sapphire accented
with blue Sapphires
(.03 ctw.).





A&Z PEARLS, INC.

EVENING WEAR

E. Honorable Mention Erica Courtney Erica Courtney, Inc.

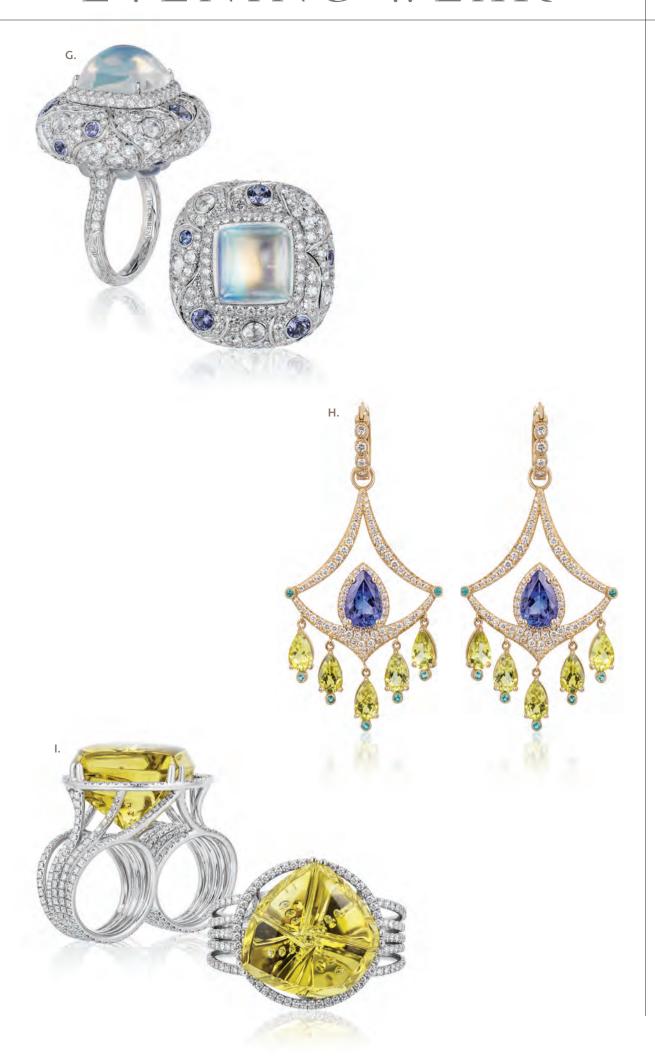
18K yellow gold "Shakti" pendant featuring a 28.6 ct. Chrysoberyl accented with Paraiba Tourmalines (1.96 ctw.), tsavorite Garnets (2.43 ctw.) and canary Tourmalines (1.75 ctw.).

F. WJA Gem DIVA™ Award Gina Ferranti GiGi Ferranti

18K rose and white gold "Cleopatra-Geometric" ring featuring a 1.55 ct. Emerald accented with Emeralds (.53 ctw.), purple Sapphires (3.03 ctw.) and Diamonds (.72 ctw.).



EVENING WEAR



G.
Honorable
Mention
Helen Kim Currens
J.W. Currens, Inc.
Platinum "Remember"
ring featuring a
9.25 ct. square
Moonstone cabochon
accented with
Moonstones (2.85
ctw.), multi-cut
Diamonds (7.20 ctw.),
Opals (.47 ctw.) and
Tanzanites (.51 ctw.).

H.
Manufacturing
Honors
Erica Courtney
Erica Courtney, Inc.
18K yellow gold
"Hera" earrings
featuring Tanzanites
(5.01 ctw.)
accented with chrome
Tourmalines
(7.97 ctw.), Paraiba
Tourmalines (.63 ctw.)
and Diamonds
(2.10 ctw.).

I.
Platinum Honors
Paul Klecka
Somewhere in the
Rainbow Platinum
"Coco Verde" twofinger ring featuring a
66.03 ct.
specialty-cut lemon
Citrine accented
with Diamonds
(6.30 ctw.).

MEN'S WEAR

A. 1st Place Zoltan David Zoltan David Steel and 24K gold ring featuring a 25.53 ct.

blue Zircon.

B. 2nd Place Mark Schneider Mark Schneider Design

Platinum and 18K yellow gold cufflinks featuring hand-carved rock crystal Quartz and Mother-of-Pearl moons (53.06 ctw.) accented with blue Sapphire cabochons (1.76 ctw.), yellow and white Diamond melee (.66 ctw.).

C.
3rd Place
Pheap Lorn-Canossi
Phenomenon Jewels
14K white gold and 18K
yellow gold "Take Me Away
to Paradise" ring featuring a
15.00 ct. green Tourmaline
accented with Diamonds
(.87 ctw.), Alexandrites and
Sapphires (3.22 ctw.).



WOULDN'T YOU LIKE TO EXPERIENCE EXHIBITING IN A SHOW THAT HAS 28 TIMES AS MANY BUYERS AS EXHIBITORS?

96% of the attendees plan on attending the next AGTA GemFair™

92%

of surveyed attendees purchased on the AGTA GemFair™
GemHall Floor.

98% of the attendees met new suppliers by walking the AGTA GemFair™

8000 qualified buyers attend the GemFair

...A show that 92% of surveyed attendees purchased on the GemHall Floor? Contact us now to select your booth in our member's most profitable show worldwide.



MEN'S WEAR

D. Honorable Mention Klaus Kutter A Jour Jewelry

18K rose and white gold cufflinks featuring Moonstones (13.08 ctw.) accented with Sapphires (2.50 ctw.), tsavorite Garnets (1.80 ctw.) and Onyx.

E. Manufacturing Honors

Adam Neeley Adam Neeley Fine Art Jewelry

Platinum and 18K yellow gold "Halryon" ring featuring a 19.14 ct. Zircon accented with Diamonds (1.23 ctw.).

F. Platinum Honors Niveet Nagpal Omi Prive

Platinum cufflinks featuring blue Sapphires (2.15 ctw.) and Diamonds (1.02 ctw.).





















CLASSIC GEMSTONES

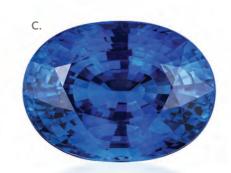
A. 1st Place Kenneth Blount 100% Natural, Ltd. 91.36 unheated yellow Ceylon Sapphire.

B.
2nd Place
Joseph Ambalu
Amba Gem Corp.
5.24 ct. untreated Colombian Emerald.

C.
3rd Place
Allen Kleiman
A. Kleiman & Co.
21.04 ct. oval unheated
Sri Lankan blue Sapphire.







ALL OTHER FACETED

A. 1st Place Mikola Kukharuk Nomad's 80.25 ct. oval tsavorite Gamet.

B.
2nd Place
Joseph Ambalu
Amba Gem Corp.
6.58 ct. untreated
Brazilian Paraiba
Tourmaline.

C.

3rd Place Christopher Wolfsberg Foxtail Gallery 44.19 ct. octagonal modied brilliant cut Tanzanite.

D.
Honorable Mention
Jose Rocha
Jewelry Television
46.75 ct. round,
Portuguese-cut Spanish
Sphalerite.











A PLACE OF ORIGIN. A SUPPLIER. AGTA Members are your ethical resource for all links along the jewelry supply chain – mine to market. Join us at 2019 AGTA GemFair Tucson: February 5 - 10 and AGTA GemFair Las Vegas at our new location in the Las Vegas Convention Center: May 31 - June.



PHENOMENAL

A. 1st Place Joel Price Joel Price 34.63 ct. oval harlequin Opal.

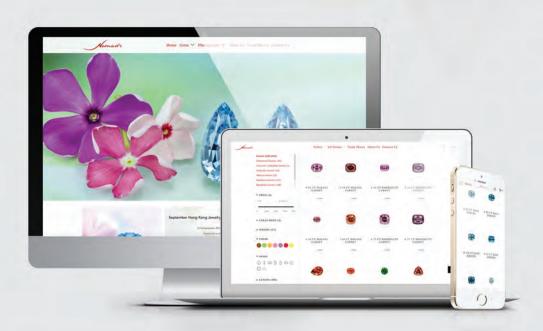
B.
2nd Place
Robyn Dufty
DuftyWeis Opals, Inc.
60.20 ct. boulder Opal
cabochon.

C.
3rd Place
Robert
Shapiro
Robert Shapiro
7.30 ct. boulder Opal.









Shop our new B2B website - open to jewelers only.

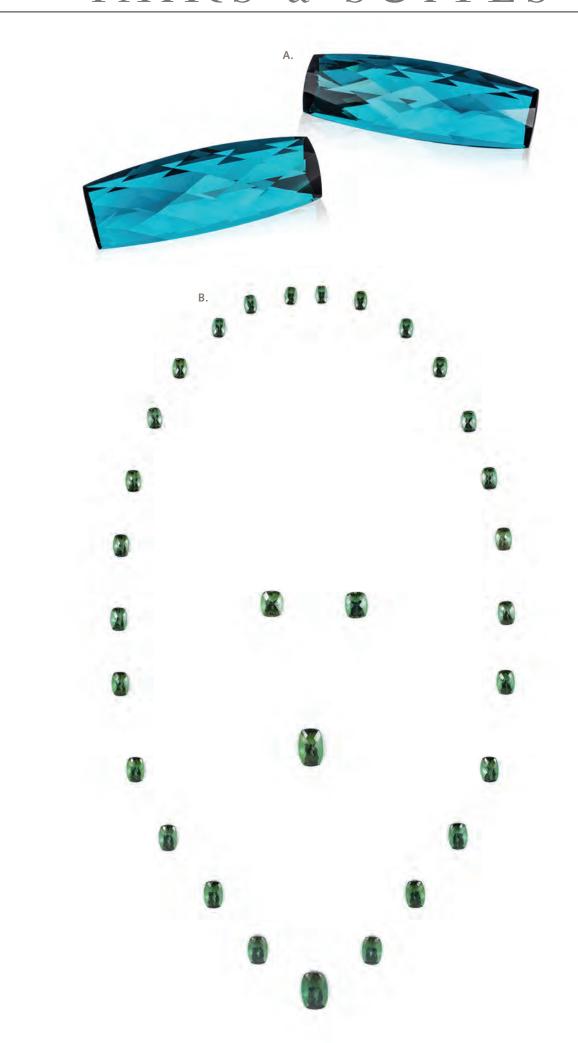
See a sample preview at gemsbynomads.com



A.
1st Place
Stephen M. Avery
Stephen M. Avery
Pair of indicolite
Tourmalines
(41.45 ctw.).

B.
2nd Place
Sean P. Sweeney
Razzcal Enterprises,
LLC
Suite of 30 green
Tourmalines
(116.57 ctw.),

titled "Boxing Day Pocket".



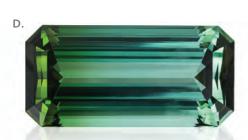
PAIRS & SUITES





C.
3rd Place
Mikola Kukharuk
Nomad's
Matched pair of round
bicolored Tourmalines
(19.74 ctw.).

D.
Honorable
Mention
Alexander Arnoldi
Arnoldi
International
Suite of three
bicolored emerald-cut
green Tourmalines
(148.46 ctw.).







INNOVATIVE FACETING

A. 1st Place Mark Gronlund Mark Gronlund 96.30 ct. round spiral brilliant-cut blue Topaz.

B. 2nd Place Dalan Hargrave GemStarz Jewelry 21.27 specialty-cut Tourmaline.

C.
3rd Place
John Dyer
Somewhere in the
Rainbow

37.30 ct. Sunstone, titled "Colorful Cascade".

D. Honorable Mention Christopher Wolfsberg Nirinjan 25.45 ct. octagonal concave-cut Sunstone

Labradorite.



CARVING





B.
2nd Place
Swapna
Pinnamaneni
Dream Choice
Jewelry
1080.50 ct. Citrine
carving, titled

"Ganesha".

Chalcedony, Calcite and

A.
1st Place
Dalan Hargrave
GemStarz Jewelry
"Frog Prince" featuring
Sunstone (160 ctw.)
accented with
Sapphires, Diamonds,
Opals, black Jade,
green Jade,

C.
3rd Place
Dalan Hargrave
GemStarz Jewelry
110 ct. Amethyst
carving, titled
"Amethstine Chapel".







OBJECTS OF ART

A. 1st Place Nicolai Medvedev Impressions in Stone Intarsia box with vaulted lid. Materials include:

Intarsia box with vaulted lid. Materials include: Malachite, Turquoise, Malachite/Azurite, Sugelite, Lapis Lazuli, Opal, cultured Pearl, Emeralds and Diamonds.

B. 2nd Place Somewhere In The Rainbow

"Go Fly A Kite" featuring a 175.01 ct. greenyellow Beryl in 18K yellow gold accented with a .26 ct. Diamond.

C. 3rd Place Somewhere In The Rainbow

Agate wild boar with black Onyx eye and white Chalcedony tusks, titled "Grey Matter".













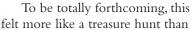


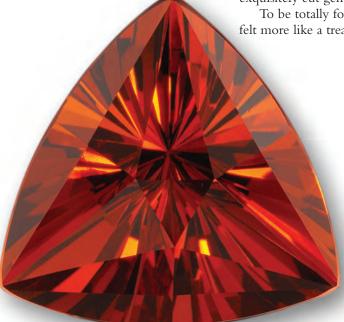
The Trends in Gemstones 18/19



s a one-time jewelry designer scouting out the Las Vegas AGTA Gem-Fair[™] 2018 to get the scoop on what the major gemstones, I wanted, well, a lot. Gemstones I had ideas for now those I would think

about later. It didn't matter that I had been a jewelry journalist for over 18 years. When you see gemstones like I uncovered at the show, your desire to own them as you begin designing around them in your head outweighs more rational thoughts. But I stuck to my assignment and held on to my credit card and swooned over what I might be able to do with James Alger's violet colored emerald-cut Garnet or John Dyer's exclusively cut Sunstone. And I didn't even know I liked Sunstone before I saw these exquisitely cut gems.







covering a trade show as I found more and more magical gemstones. I unearthed more colors in the Garnet family as well as enchanting hues of Sapphires; Tourmalines that made my mouth water and stones that were once considered inferior in superior cuts and quality. And there were the combination gemstones such as Ametrines, which have been around for a while, but the new cuts and vibrancy of these gems really allowed them to shine.

In addition to the kaleidoscope of exuberant colors these themes caught my attention:

WHAT EVER OLD IS NEW AGAIN

The adage is true. Traditional cuts such as pear shapes and marquise for both smaller and larger stones and princess and baguettes for smaller ones have made a comeback this season in a rainbow of hues for colored gemstone rendering them relevant for contemporary designs and modern customers.

RARE-ING TO GO

Exclusive cuts have also become all of the rage. These have been gaining popularity for seasons and during this show, they really took off. From carved leaves and flowers in Tourmalines, to John Dyer's specialized cuts of Ametrine, Sunstone and Garnets among others, to elongated pear shapes in bi- and tri-colored Tourmalines, more linear rectangular shapes in all Garnet colors as well as a host of rare gems such as Paraiba Tourmalines, Padparadscha Sapphires and trapiche Emeralds.

It seems that limited edition and one-of-a-kind cuts are the way gemstones dealers are attracting designers, retailers and end users—the consumers who are looking to stand out rather than blend in. One of my personal favorites were the hexagon rose-cut moonstones at Temple Trading.

And yes, I actually bought one of these and created an antique looking pendant out of it. It was affordably priced, and I couldn't walk away without at least one gemstone in hand.

Speaking of Moonstones- the other theme I noticed were gemstones with meaning were a huge theme that called out to designers who are creating symbolic, spiritual and sentimental jewelry.

There were of course the big three: Rubies, Emeralds and Sapphires, but I am sure you have heard enough stories about them. I have chosen gemstones that have their own lore and legend and have been trending on the color front for the past couple of seasons.

A COLORFUL PAST

MOONSTONE

Magic has always been associated with the glittery stars and "the light of the silvery moon" set, aglow in the evening sky. And, Moonstone definitely reflects its namesake's enchanted and ethereal reputation throughout different time periods and cultures. From antique to modern jewelry, these gemstones offer intriguing beauty and equally captivating significance. Moonstones were held in high esteem throughout history. Variations on the theme of romance and passion as well as protection and luck are all part of the mystical properties of Moonstones. What more could you ask for in gemstone? The Romans believed that the stone was solid ray of moonlight filled with good fortune. In

India it was sacred, given as a traditional wedding gift; while Middle Eastern cultures present it to couples to ensure fertility and a big happy family. From the East to the West, the Moonstone's main attribute is...love. It is associated with promoting harmony and a happy future among couples. As if that wasn't enough, Moonstones were worn for centuries by travelers for protection and to guide them in the evening hours. It is also one of June's three birthstones, along with pearl and alexandrite.

GARNET

Friendship, devotion, compassion - these are just some of the meanings associated with Garnets - evoking the sentimentality and significance of January's birthstone. In the Hindu culture, Garnets are associated with the first chakra, or the root chakra, at the base of the spine, meaning healthy sexual activity and feelings of security and stability. The sometimes fiery red pyrope Garnet or more purplish deep majestic red almandine Garnet is one that is imbued with many legends and has a long historical and storied past. It is also a gemstone that is available in almost every color - from deep orange to vibrant green – in addition to the red variations. In Rome, Garnets were widely traded gemstones and carved Garnet signet rings were used to stamp the wax that sealed the contracts on important documents. Large deposits of red Garnet were discovered in Bohemia in Central Europe around the 16th century, which would become the main focus of jewelry in the 18th and 19th centuries. In the Georgian period, garnets were one of the most desirable gemstones - they were affordable and complemented almost every complexion. These Garnets were flat cut and enhanced by backing them with tinted metal foil in a closed-back setting. During Victorian times, garnets were rose cut and were set into low carat gold. There was also a trend towards the traditional handcrafted Bohemian design, which was designed in gilt metal and showed great beauty in a cluster-type arrangement such as the sun and the moon, horseshoes, and floral motifs. Today Garnet in all of its red permutations as well as the oranges, greens and violets remain one of the most popular gemstones among jewelry enthusiasts.

AMETHYST

The imperial color purple was worn by the rulers of the Byzantine and Holy Roman Empires, thus Amethyst became associated with Ecclesiastical jewels and European aristocracy, adorning the fingers of bishops as well as the coronation regalia of British royalty. In the 18th-century, Amethysts were set into closed foilbacked Georgian basket rings and were a popular stone for antique rivieres. The 19th-century discovery of a large deposit of amethyst in Brazil lowered the cost, allowing large Amethysts to be set more frequently into jewelry throughout the 20th century. When we talk about the spiritual quality of Amethysts, we go back to Greek legends that associated Amethyst with Bacchus, the god of wine, which the color of Amethyst resembled. It was believed that wearing Amethyst prevented drunkenness—this branched out into a broader meaning of clear-headed and quick-witted thinking in battle and in business affairs. Often seen as a gemstone of peace and calm, it was thought to soothe nightmares. It is February's primary birthstone. ** By Beth Bernstein













OVERVIEW OF BASIC SPECTROSCOPY TECHNIQUES AND THEIR GEMOLOGICAL APPLICATIONS

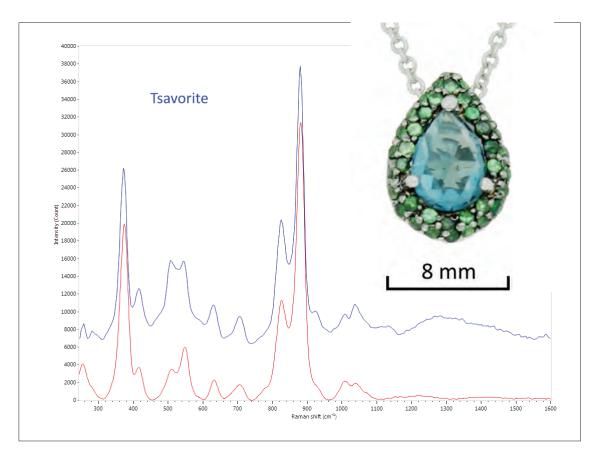


FIGURE 1: The small green stones mounted in this pendant were identied as tsavorites in less than 20 seconds by Raman spectroscopy. *(Photo: Alberto Scarani)*.

n recent years the continuously increasing demand and the consequent scarcity of good quality gems have led to the appearance on the markets of materials not traditionally used in gemology, and to the proliferation of synthetics and treatments of all kinds. Furthermore, when these "new" materials are mounted, the traditional gemological approach seems not effective enough anymore to fully solve issues that nowadays have

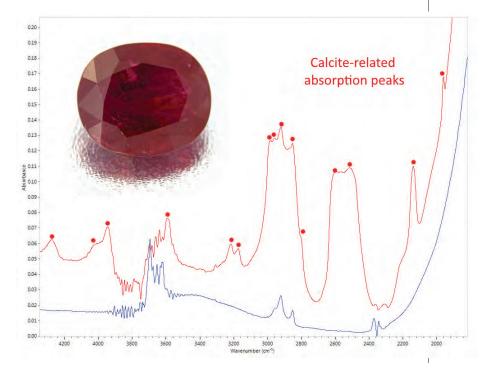
become critical in the daily work of the laboratories; hence, the urgent need for updating of knowledge and instrumentation.

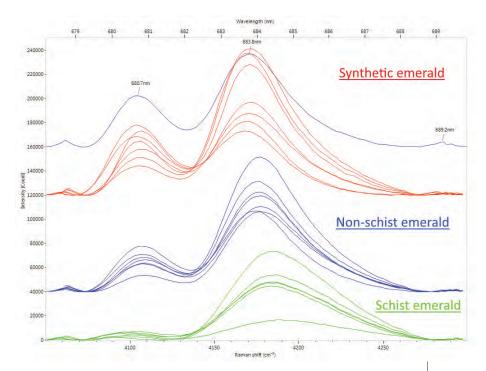
A number of spectroscopic techniques once used only by the major labs are now available and affordable to the mainstream gem dealer/jeweler/gemologist. This was once addressed in literature as "advanced" and now seems to be becoming indispensable in the even smallest businesses in facing this new situation. We will give a quick overview on several spectroscopic techniques and on their gemological applications which are now considered as "entry level" in the modern laboratory. This sophisticated equipment has become affordable, much easier to use, and is now being purchased by gemologists, jewelers, gem dealers, and even the relatively new students of gemology.

Raman spectroscopy is the only technique which can provide for a fast, reliable and non destructive identification of polished and rough gems, either loose or mounted, without the need of further test (Figure 1 left). It is not by chance that a Raman spectrum is often called "fingerprint". Every single material has its own and, if the spectrum is clearly readable and not noisy, its 100% accurate. Still Raman spectroscopy provides for very limited applications in case of synthetic gems. Same is found with the refractometer, most of synthetic and naturals are not distinguishable from each other.

Another vibrational technique which is nowadays considered indispensable is the Fourier-transform Infrared spectroscopy (FTIR). Raman and FTIR are considered "sisters" in the gemological laboratory. While Raman gives its best results for gem material with definite crystal structures, FTIR provides for better outcomes when amorphous and organic products are involved, but not only, since it was originally used for the classification of diamond types. FTIR is the standard lab technique to identify fillers in emeralds, jade and other gems. It's the definitive tool used to discriminate copal from amber, synthetic alexandrite from its natural counterpart and, in case of emeralds, FTIR spectra of all the synthetics are so specific that it is even possible to spot the synthetic method and, sometimes even the manufacturer, as in the case of Tairus, Biron, and Malossi.

FTIR is nowadays proved to be extremely useful for giving indications of heat treatments in corundum. As an example, the presence of a specific absorption peak in ruby from Mozambique is widely considered as a proof of heating process. At the same time, when in an FTIR spectrum features coming from inclusions like bohemite, diopside, kaolinite and calcite are revealed (Figure 2), it can be excluded that the ruby or sapphire has undergone the typical heating treatment. In





TOP: Figure 2 - FTIR absorption spectra of two Rubies from Mogok, Myanmar. The red spectrum highlights peaks (the red dots) due to intact inclusions of calcite that lead to the exclusion of heat treatment. It is useful to remember that the simple absence of these peaks in the other sample does not necessarily prove its character of heated stone BOTTOM: Figure 3 - Emerald treated by impregnation. In the photo on the left the observation of the gem by darkeld and optical ber lighting. In the right-hand one, the uorescence spectroscope probe makes visible the ller inside an outcropping fracture. The chalky whitish-blue color combined with the evaluation of the resulting spectrum make it possible to identify the ller as synthetic resin. (*Photos: Alberto Scarani*).

many cases, however, a combination of more techniques is required to correctly evaluate those crucial indications. Heat treatment of corundum is performed either on metamorphic and basaltic origin material and, to be effective, a different composition atmosphere (oxidizing or reducing) needs to be carefully adjusted. The treatment can leave traces depending on the atmosphere used, but to

correctly evaluate those hints, the geologic origin of the stone needs to be identified as well in advance. UV-Vis-NIR spectroscopy can discriminate between these two geologic specific origins so, in this case, it's a matter to combine data coming from different techniques. We all know how much important can be today the presence of copper in an elbaite blue tourmaline. What was considered nothing but a curiosity only few years ago, has recently become a discriminating market factor to the point that even a relatively small amount of copper impurity can increase the commercial value of a neon blue elbaite of 10, 20, 50 or more times. Copper impurities produce a very specific absorption band in the NIR area of a tourmaline spectrum, far above the limit of 700 nm of an handheld spectroscope, so it is intuitive that, for its identification, an instrument capable of recording a spectrum in such range is mandatory and here is where an UV-Vis-NIR unit is required.

Chromium is one of the most common contaminant element in gemstones. Its presence can be easily identified even by an handheld spectroscope, so why bother to use a spectrometer to do that? The first reason is a practical one: a spectrometer is far more precise in spotting the exact wavelength of features and it's able to record them for an easier evaluation. By using a strong visible monochromatic source is possible to stimulate chromium in producing very clear and specific **photoluminescence** emission bands that can led to the identification of gems and, as in the case of spinel, to their possible treatment. The main emission feature of chromium in natural untreated spinel is narrow and centered at 685.5 nm. If heating is applied to enhance the appearance of a natural stone, a modification in the crystal lattice will occur and, as a visible result, the main band of chromium will get wider and its maximum will be shifted towards higher wavelengths. That is the case even of synthetic spinel where heating is involved in the growth process. Corundum, emerald, spinel, tsavorite, alexandrite, imperial topaz, those are only some of the gems which can be positively identified by their characteristic and unique photolumi-

nescence spectra. It was recently demonstrated that the position of the two main emission peaks of chromium in emeralds can discriminate schist from non-schist origin emeralds and synthetic too (Figure 3).

Fluorescence is one of the most used gem properties in gemology. The UV box has always been present on the gemological desk and there is a large number of stones that emits fluorescence whose colors and intensity have been used for decades as diagnostic indicators by

gemologists. However, that is simply a visual observation and the human eye is not efficient enough to perceive all the reactions and related degrees that the stones emit. By replacing the human eye with a spectrometer and by intensifying the ultraviolet source, it is possible to significantly increase the amount of data that this technique can provide. Similarly to what happens for photoluminescence spectroscopy, also in this case the chromium present as impurity produces precise reactions allowing the identification of the gemological material. In the case of emeralds treated by impregnation, it is possible to determine the organic or synthetic origin of the filler by observing the color of the reactions and the fluorescence spectrum (Figure 4). Fluorescence spectroscopy has been successfully used lately as a fast screening method for synthetic diamond and more applications for colored stones have been developed.

This is just only an overview of some of the possible

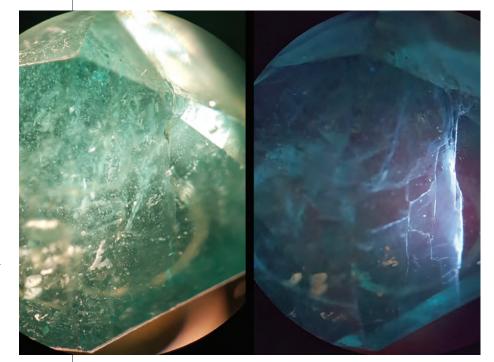
gemological applications available for these spectroscopic techniques. An important consideration concerns the skills required to use these apparently so complex tools. Gemologists generally do not have academic scientific degrees and the gemological courses rarely include this instrumentation except for brief hints. It is therefore understandable the reluctance of many gemologists to deal with the purchase of these still rather expensive devices with the fear of not being able to make the most of them. At this point it is useful to remember that the tools are only part of the equation. An equally important part is constituted by spectral databases. In fact, without these, the interpretation of the results would be completely left to the operator who should then necessarily have specific scien-

The readings in the refractometer would not make sense without RI tables. Being in possession of reference spectra, the work of the operator is reduced to a simple evaluation by direct comparison. It is obvious that, as for

any other tool, it is essential that the operator thoroughly knows its characteristics and, above all, understands when the results, for whatever reason, might not be consistent. In conclusion, technological progress and miniaturization have rapidly led to cost reduction of the apparatus and the diffusion of specifically gemological spectral databases is allowing them to become increasingly widespread. It is probable, however, that the definitive leap will occur only when their presence will be firmly and organically included into the gemological course notes provided by the most renowned educational institutes.

As a last note, we would like to stress that these units should not be labeled as black-magic- boxes. In fact, if in many cases the data obtained can be considered diagnostic and definitive, in many others they are only elements to be added to the others collected by the gemological investigation and therefore as such they must be taken into account by the expert gemologists, who will eventually make their definitive conclusions.

Alberto Scarani, Graduate Gemologist, Magilabs – Stone Group Laboratories



TOP: Figure 4 - zoomed detail of photoluminescence spectra of emeralds of synthetic and natural origin, schist and non-schist. The purple spectrum on top shows the positions of the chromium peaks superimposed on those of the synthetic samples. Note the scale expressed in nm above: the gap that characterizes and differentiates the various materials is very small indeed. (*Photo: Alberto Scarani*).

AFFILIATE MEMBER PROFILE

DANIEL R. SPIRER, G.G.: DANIEL R. SPIRER JEWELERS, LLC



Will you share about yourself, where you grew up, and your family today? I grew up in Stamford, Connecticut.

My father was an engineer and then a statistics professor at University of Connecticut. My mother was a politically active stay-athome mom. I had an older brother and a younger sister. My mother and father are still alive (87 and 92). My brother has just acted on his threat to leave the country if Donald Trump got elected president and moved to Portugal. My sister has a daughter she adopted from China. My younger son runs a high-end car detailing business in LA. My older son (technically step son but he's been with me since he was 4) is a well known artist in NYC. The Museum of Modern Art owns one of his pieces. I only wish I could sell my jewelry for as much as he gets for his paintings.

Tell us the fascinating story of how you got your start in the jewelry industry. I had a friend in junior high school whose father had a jewelry store. I worked sweeping floors for him when I was 14. When I was 15, I went in one day just to say hi and he offered me a job.

Tell us about your journey and beginning in the jewelry business to today. Where you trained as a jeweler? I worked for the jeweler in my home town from when I was 15, until I was almost 20. The jeweler I worked for worked primarily in silver, was a very talented artist as well and was also a great businessman. I worked after school with

him for a number of years and then took a year after high school and worked for him full-time. I moved to Massachusetts to go to college part-time and had to support myself so I put together a line of silver jewelry and went out and wholesaled it to anyone I could find in the area. After a year I dropped out of college (it didn't help that I spent more time traveling back and forth to school then I actually spent in a classroom) as I was so busy with work. Initially I worked out of my apartment but eventually I found a workshop and at one point had nine employees working for me. Due to a bad business decision (and a good one for me personally but not so good for business) I closed my wholesale business and took in a partner, who had been one of my employees.

We went out on the craft show circuit for five years. During this time period, I taught myself how to work in gold. I was a prolific reader and I didn't mind screwing up a lot of stuff so I would pretty much try anything. We found we were somewhat stalled in the craft show circuit so we began a search for a storefront. I lucked upon a location in Cambridge, MA on a main drag and I opened, with my partner, Spirer Somes Jewelers in 1982. In 1984, I completed my gemology training at the GIA and got

my Graduate Gemologist degree. By 2000 we had three full-time employees. In 2004, the partnership broke up due to differences that had developed due to my partner being ten years older than me and not wanting to work as much. I opened my own store, located in the same building in 2004 under the name Daniel R. Spirer Jewelers, which is where I still am today.

Who are custom jewelers you admire and respect?

Well, I'm a custom jeweler so I like myself a lot! I have a number of locals I am friends with and I wouldn't be friends with them if I didn't respect what they do. Ed Spencer of Skylight Jewelers is one. Geraldine Perry of Fairbank and Perry is another.

Tell us more about the person who introduced you to the jewelry industry and about your love for colored gemstones?

The man I trained under originally is the one who introduced me to the jewelry industry (as described above). However my love for colored stones was due to George and Irene Nielsen, who owned a gemstone import business and I originally got all of my gemstones from them. They exclusively sold stones cut in Germany and, although most of them were relatively inexpensive Agates, they were all the

Below: Daniel Spier at 17



best quality that could be found and were cut better than anything else on the market. George had a great love of fine gem materials. He pushed me to get my G. G. degree and sold me some of my original gemstone equipment for next to nothing (most of which is still in use today). George and Irene took me under their wings in many ways and I have always remembered them fondly.

Will you share with us the changes you have witnessed in the last 36 years since you opened in Cambridge?

I actually think the most changes have happened in just the last few years and most of it has been negative. There has been a distinctive shift away from owning things among the young generation, and when they do purchase things, it's always on-line and always price driven. As a bricks and mortar store, it has been hard to compete with that.

What initially attracted you to AGTA?

I originally bought a lot of my gem materials from James and Pat Alger and Barbara Lawrence who were all active early on with the

AGTA. They strongly encouraged me to join. Given that their ethics and mine were pretty much the same it was a no brainer. Plus I had been disclosing treatments to customers before the AGTA existed so it wasn't a big leap to join up.

What is your favorite colored gemstone? And why?

This depends on the day and on what stone I am looking at or working on. Sapphires (mostly fancy colored and especially purple) are high up on the list. But some days Opals are so intriguing to

me that they would be number one. But then a great orange Garnet can make me start drooling. Or a killer Tourmaline. Or South Sea Pearls that are black with intense greens and pinks in them. You know, I think it would be easier to answer this question the other way: What is my least favor-

ite gemstone? I'd probably go with Citrine or Peridot with that.

What gemstone has been the most challenging to you when creating a custom, one-of-a-kind article of adornment? Large Emeralds with a lot of jardin are always the most challenging. I really hate having to push heavy prongs down on those stones.

Tell us about the changes to the trade that you have witnessed through the years? Also, how are you guiding your firm to meet today's challenges?

I'm not sure anything in the trade hasn't changed in some way or another since I've been in business. Since I am the entire firm I can't

tell you I'm guiding anyone. But I do try to stay on top of my social media commitments and my blog.

Please share your thoughts on responsible sourcing and social responsibility in the colored gemstone industry.

While in my heart I think this is great, the reality is that our resources are

highly valuable, easily portable, and hence subject to a lot of criminal activity. No one can truly tell you where a lot of our material comes from. While it is sometimes possible to track things back to a particular source, who really knows if other material is being salted into parcels? I try to take a middle of the road approach. I will do whatever I can, within reasonable limits to source responsibly. But I refuse to guarantee anything I can't verify with my own eyes to my customers.

Tell us about Daniel R. Spirer Jewelers today. Who works with you in the ______ store?

I work alone in my store these days. My wife takes care of the books. Other than that it's all me, all the time!

What has your membership with the AGTA meant for/to you? I have always liked that I could tell customers that I belonged

and show them the ethical concerns that AGTA promoted. Even though I was going to do it anyway, it was always nice having reference points I could point to and organizations I belonged to that mandated that I sold ethically.

Whom have you admired in the colored gemstone industry?

I most admired the people I work closely with. James and Pat Alger, Barbara Lawrence, Robert Shapiro.

What is the one thing that makes you proudest about Cambridge?

We are an amazingly diverse city.

What is the best museum in your area that people miss?

That would be the Museum of Bad Art in Somerville. It truly is a museum of bad art, located in the basement of a movie theater. They do have regular showings with different themes. And boy is the art bad!

What is your favorite Cambridge restaurant?

It depends on the day of the week. A lot of my true favorites have closed over the years.

What is your favorite off-the-beatenpath destination?

Anywhere in Big Sur, California.

Tell us something about yourself that most people don't know.

I'd like to say that it's that I'm a tequila aficionado (I've tasted well over 500 different ones) but I think a lot of people know that already so I'm not sure if that counts.

By David M
Baker, G.G.,
Membership and
Education Manager



Top Clockwise: 18K and 22K gold earrings with boulder Opal splits and green Garnets. 18K yellow gold ring with heated blue Sapphire and Diamonds. 18K yellow gold ring with natural orange Sapphire and ideal-cut Diamonds. "Black Hole in the Center of a Spiral Galaxy" 18K and 22K gold pin with a South Sea black Pearl, Emeralds, purple Sapphire, and Diamonds.





WELCOME

FIRM MEMBERS
Village Silversmith, Ltd.
John Bajoras Gloucester, MA

Juvel Brand Robert Brand Aventura,FL

NoorGems Inc. Yahya Noor Los Angeles, CA

ASSOCIATED INDUSTRY Professionals

CAI Insurance Agency, Inc. Laura Clyde Cincinnati, OH

Manufacturing **M**EMBERS

LD Studio LLC dba Linhaus Lisa Linhardt New York, NY

RETAIL MEMBERS

Aviva Shapiro Aviva Shapiro Brooklyn, NY

Emerald CityJewelers Sheri Busse Quincy, IL

STUDENT MEMBERS

Jimmie R.Bailey Casper, Wyoming

Carol Joy Krieks Irvine, California

Alexander Stufflebeam Indianapolis, Indiana





INSIDE



Take a look inside 2019 AGTA GemFair $^{\text{TM}}$ Tucson.

What you see may unexpectedly surprise you – over 200 AGTA Members showing on the main GemHall floor and over 35 unique designers in the Designer Grand Ballroom.

Our Members are your ethical resource for all links along the jewelry supply chain – mine to market.

*Register now at agta.org and join us.





"Interplanetary, Extraordinary... ...Love's a Supernatural Thing.".-Ben E. King

SUPERNATURAL GEMS

"An Expression of Love"

2017 First Place



15 Cts No Heat Pink Sapphire

2018 First Place



91 Cts No Heat Yellow Sapphire

2017 Honorable Mention



21 Cts Black Opal

100% Natural Ltd.

www.supernaturalgems.com

(212) 371-1177