



**vacuum** TECHNOLOGY  
**& coating**

**2020  
MEDIA KIT**



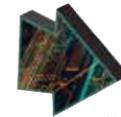
# 2020 Media Kit

## The Leading Monthly Publication Exploring Thin Film Vacuum Deposition & Coating

Of VT&C's 30,000 total print circulation, 15,000+ subscribers are from the manufacturing side which we have broken down into the following 37 key markets:

- Aerospace, Military & Defense, Marine
- Automotive Industry or Suppliers Exclusively to the Industry
- Bearings
- Building & Construction Including Materials
- Electrical, Passive Electronic, or Other Types of Industrial Components
- Consumer Electronic Products or Systems
- Crystals
- Compound Semiconductors
- Computers & Peripherals
- Data Storage Systems, Devices or Components, Print Heads, Recording Heads
- Decorative Coatings, Shower Heads, Faucets, Sinks, Tubs
- Food Industry for Human or Animal Consumption, Beverages, Candy, Chewing Gum
- Fiber Optic Component, Systems or Materials
- Flat Panels, Displays, Monitors, Touch Screens
- Glass: Architectural, Commercial, Consumer, Laboratory, Optical
- Holography
- Heating & Cooling: Refrigeration, Heating, Air Conditioning
- Imaging Systems
- Instrumentation
- Industrial Controls for All Industries
- Lasers, Systems, and Components, Laser Optics
- Lighting for All Industries
- Medical
- Motion Control & Robotics
- Multi-Industry Groups, Multiple Non-related Product Groups
- Optics and Ophthalmic: Lenses, Mirrors, Prisms, Materials
- Optoelectronics
- Packaging for All Industries
- Plastics
- Power Industry, Including Power Systems, Batteries, Fuel Cells
- Safety & Security
- Sensors
- Semiconductors & Other Solid State Devices
- Tool Coatings, Tools: Industrials, Consumer including Razors & Blades, Lighters, Pens
- Telecommunications
- Thin Film Coating Services, Thin Films or Thin Film Materials, Other Related Services
- X-Ray Tubes, Cathode Ray Tubes

## VT&C Readership Information



VT&C's print issue reaches 9,300+ key R&D scientists and engineers at the U.S. national labs, government labs, and universities. These are well-funded people who comprise many hundreds of individual research project teams, each with its own vacuum needs and applications. At NIST alone VT&C reaches 470+, with 140+ more at Brookhaven, 300+ at Argonne, 170+ at Livermore, and 160+ at Sandia.

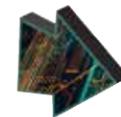
VT&C also reaches 4,000+ industry professionals at the companies who make capital equipment and materials. This list includes Applied Materials, AJA International, Kurt J. Lesker Company, MDC Vacuum Products, Busch USA, Lam Research, KDF, Telemark, Semicore, Nor-Cal Products, Leybold USA, Pfeiffer Vacuum Inc., Accu-Glass Products Inc., Fil-Tech Inc., Materials Science Inc., ULVAC Technologies, MKS Instruments, Sumitomo (SHI) Cryogenics of America, Nano-Master Inc., R.D. Mathis Co., InstruTech Inc., Intlvac, Sierra Applied Sciences Inc., XEI Scientific, just to name a few. We reach virtually all of the major vacuum process system producers in the country. That list also includes materials suppliers, test & inspection equipment suppliers,

manufacturers' reps and marketing professionals. Many names on this list are potential buyers for your product line.

VT&C's print magazine averages 30,000+ subscribers plus additional distribution at vacuum-centric conferences and trade shows. VT&C Digital and Weblog Announcements additionally reach 5,000+ subscribers. In addition, tens of thousands visit the online VT&C digital edition and website every month. If you need any additional information, please give us a call at 1-336-432-9627.

One popular cornerstones of VT&C is the monthly Product Showcase which features targeted product listing groupings. Each month, VT&C publishes one Product Showcase, which appears both digitally and in print. Topics include Thin Film Deposition, Coating, Cleaning & Etching Equipment; Thin Film Metrology, Measurement, Characterization and Analysis Equipment; Gas Analytical Systems Instrumentation & Metrology; Vacuum Pumps; Power Supplies; Deposition/Coating Targets, Sources & Accessories; Materials - Oils, Fluids, Lubricants, Chemicals & Gases; and many more.

## ADVERTISING IN VACUUM TECHNOLOGY & COATING



VT&C has a high editorial content with only 25-35 percent of the total folio content being advertisements, thus resulting in a high ratio of editorial content. The policies of the publisher are extremely user-friendly to companies that advertise and thus, support the magazine financially. Most advertisers fall into the following major groups:

1. Companies that manufacture vacuum processing equipment and the materials used in the process. The processes most often covered are physical vapor deposition, plasma processing, chemical vapor deposition, crystal growing, etc. The materials most commonly advertised in VT&C are sputtering targets and materials, evaporation sources, substrates, and chemicals. Process controllers are also advertised heavily, as are e-beam sources, ion beam sources, sputtering sources, and rf power supplies
2. Companies that supply vacuum components such as pumps, valves, flanges & fittings, seals and feedthroughs, bellows, chambers, traps, chillers and heaters.
3. Manufactureers of instruments used in the deposition or other vacuum processes such as metrology systems, spectrometers, vacuum gauges, leak detectors, flatness, thickness and hardness testers. Gases and gas-handling systems are also highly appropriate
4. Providers (or Suppliers) of Thin Film Coating services, plasma cleaning services, and other vacuum processing services are also found frequently.





**Peter M Martin, Ph.D., Executive Editor & Senior Technologist**

Columns & Blog: **Thin Film Technology, Surface Engineering & Back-to-Basics**

Dr. Martin has been the Executive Editor for Vacuum Technology and Coating magazine since 2005, and the Thin Film Editor since 2000. He is currently an Emeritus Fellow at Pacific Northwest National Laboratory, and retired from PNNL in 2008 as a Laboratory Fellow. He worked for PNNL for over twenty nine years where he specialized in developing thin film coatings for energy, biomedical, space and defense applications. He is a SVC Mentor, Past President and Program

Chair. He holds over forty five patents in the field of thin films and has won numerous national awards in thin film technology and microfabrication. He edited the totally revised Third Edition of Handbook of Deposition Technologies for Films and Coatings (Elsevier) and recently authored Introduction to Surface Engineering and Functionally Engineered Materials (Wiley/Scrivener). Peter has written over 500 technical publications and given over 200 presentations, has won three R&D 100 Awards for his work in microfabrication and barrier coatings for flat panel displays, has two Federal Laboratory Consortium (FLC) awards, was selected Battelle Technology of the Year (2003) for his work with the photolytic artificial lung, voted Distinguished Inventor, and Battelle 2005 Inventor of the Year. He also teaches short courses on Photovoltaics, Smart Materials and Energy Materials and Applications. Peter's Blogs cover the basic science and technology of vacuum deposition processes.



**Terrence Thompson, Technical Editor**

Column & Blog: **Product Showcase and Observations & Opportunities Blog**

Terrence (Terry) Thompson is a technical editor for **Vacuum Technology & Coating** magazine. He is a microelectronics manufacturing industry veteran with more than three decades of experience in technology publishing. He served as executive editor of *Wafer & Device Packaging and Interconnect* magazine. and was the editor of *Chip Scale Review* and *HDI—High Density Interconnect* magazines that all addressed semiconductor chip and wafer-level test, assembly and packaging. He has also held the top editorial post with *Solid State Technology* and *MicroLithography World* magazines. He was the editorial director for *Microelectronic Manufacturing & Testing* (later *Microelectronic Manufacturing Technology*) and *Hybrid Circuit Technology* magazines. He also was the founder, editor and

publisher of the *Display Technology Report* newsletter on advanced displays and related technologies. Earlier, Thompson was the editor of *Assembly* magazine.

Thompson conceived, organized and ran three major industry technical conferences: the Assembly Technology Expo (later the Assembly & Automation Expo, now the Automation Technology Expo), the HDI Expo and Conference, and the International Wafer Level Packaging Conference (IWLPC).

He has made technical presentations on microelectronics manufacturing at major conferences and seminars in the USA, Japan and Malaysia. Mr. Thompson's manufacturing career began as a manufacturing engineer at AT&T. He later worked at Motorola Inc. followed by General Instrument Corp. He is a Certified Manufacturing Engineer in automation with the Society of Manufacturing Engineers and also contributed chapters to the Society of Manufacturing Engineers' books on automation. Terry's Blog, *Observations & Opportunities*, addresses global technology and market high-growth areas for vacuum-centric processes and materials going forward.



**Steve Hansen, Contributing Editor**

Column: **Guides to Vacuum Technology**

Steve Hansen is a consultant specializing in vacuum technology related product development and education. He retired from MKS Instruments in 2009, the company he joined in 1995. In his years with MKS he was responsible for developing vacuum, instrumentation and plasma training courses as well as MKS' line of vacuum and plasma training equipment. He was also responsible for the calibration product line and the US service operations for several of the company's product lines. Steve's background also includes many years in the semiconductor industry where he was involved in process development.

With a nearly lifelong interest in vacuum technology, Steve founded the educational journal "the Bell Jar" in 1992. A web presence was established in 1994. With a target audience of amateur scientists and educators, the American Vacuum Society has considered "the Bell Jar" to be of sufficient significance to warrant a place on the society's "Vacuum Science & Technology Timeline: 1500-2007."

Steve continues to be active with monthly columns in Vacuum Technology & Coating. He is also involved with educational product development.

Steve received his BSEE degree from Northeastern University in 1972 and is the holder of two patents in the field of semiconductor manufacturing. He and his wife now reside in Owl's Head, Maine.



**Matthew R. Linford, Ph.D., Contributing Editor**

Column: **Characterization of Thin Films and Materials**

Matthew R. Linford received his B.S. in chemistry from BYU. He then obtained an M.S. in Materials Science and a Ph.D. in Chemistry from Stanford. His post-doc was at the Max Planck Institute of Colloids and Interfaces in Germany. He is now a professor in the Department of Chemistry and

Biochemistry at Brigham Young University. Linford has nearly 250 publications. He is an editor of Applied Surface Science, an Elsevier journal with an impact factor of 2.7. He is a fellow of the American Vacuum Society. From Google Scholar, his h-index is 30 and his i10-index is 69. Linford's research focuses on the development and characterization of new materials for separation science and for data storage, and on mathematical methods for data analysis.

of **Vacuum Technology and Coating** magazine, teaches vacuum related courses for American Vacuum Society and Society of Vacuum Coaters, served on the Board of Directors of the AVS, served as Chairman of the AVS and the IUUVSTA Plasma Science Divisions, and consults on vacuum science and technology, and microwave material processing.

**Robert (Bob) A. Langley, Ph.D., Associate Editor**

Retired from Oak Ridge National Laboratory in 1994 and Sandia National Laboratories in 1999. He has performed research in the fields of atomic and molecular physics, solid state physics, material science, vacuum science and technology, upper atmospheric phenomena, fusion power, and high-energy accelerators and published over 130 scientific papers. He is associate editor



**Abhijit Biswas, Ph.D., Contributing Editor**

Column: **Nanotechnology**

Abhijit is an entrepreneur and a scientist. He has published 100+ papers in international journals and three text books in electrical engineering and holds several patents. He was Associate Professor in Electrical Engineering in the Center for Nano Science and Technology at the University of Notre Dame, Indiana. He has several years of experience in scientific research initiatives and leading research projects in nanocomposite, materials for sustainable energy and materials for biomedical applications and nanotechnology in various academic settings. He is a member of the editorial board of Particulate Science and Technology Journal and Journal of Advanced

Mechanical Engineering. Abhijit has been on the US National Science Foundation's proposal review panel in engineering and an invited reviewer for research proposals in science and engineering for the Romanian Research Council in Romania and the Technology Foundations in the Netherlands. He has presented numerous invited and keynote talks at national and international meetings in the areas of nanoscience and nanotechnology, and has directed several nanomaterials R&D programs with budgets totaling over \$10 million that have been funded by the Department of Defense and other Federal Agencies in collaborations with university, industry and government lab partners. In addition, Abhijit has been a reviewer and adjudicator of more than 30 international journals in nanotechnology, medicine, biology, physics, chemistry, materials science and engineering. Abhijit co-founded two companies. He can be reached at abbt@yahoo.com



**Ilker Bayer, Ph.D., Contributing Editor**

Column: **Nanotechnology**

Dr Ilker S. Bayer is a Researcher at the Smart Materials Group at the Italian Institute of Technology in Genova and a visiting Professor at the University of Virginia, Department of Mechanical and Aerospace Engineering. He obtained his PhD degree on Mechanical and Industrial Engineering from the University of Illinois. Later on he worked as a post-doctoral researcher at the University of Alaska-Fairbanks on polymer nanocomposites and applications and returned to the Aerospace Engineering

Department at the University of Illinois. Between 2008-2010 he worked at the University of Illinois at Urbana-Champaign as a research assistant professor in the Department of Mechanical and Aerospace Engineering before joining IIT in 2010. Dr Bayer's current research interests include fabrication and characterization of functional polymer nanocomposites, preparation and characterization of biomaterial nanocomposites for antimicrobial applications and drug delivery, processing of novel cellulosic materials, new generation polymer blends and surface modification and functionalization. Dr Bayer advises a number of graduate students and post doctoral colleagues. He has published over 80 research papers and holds several patents.



**Narendra Parmar, Ph.D., Contributing Editor**

Column: **Nanotechnology**

Narendra Parmar received his Ph.D. degree in Physics from the Department of Physics and Astronomy, Washington State University (WSU), Pullman in 2012 specializing in ZnO semiconductor crystal. In his Ph.D. thesis work carried out under the supervision of Prof. Kelvin Lynn, he worked on defect engineering and p-type doping of ZnO bulk single crystals grown by melt, hydrothermally as well as chemical vapor transport methods. He gained considerable expertise on post growth thermal processing and doping methods in order to manipulate the electrical behavior and achieve p-type doping of ZnO crystals. He has several years of experience in the design, development and utilization of hardware and software for scanning probe techniques, UHV systems and many complementary spectroscopic characterization techniques. Dr. Parmar continued his work on ZnO as a post-doctoral fellow in the same group at WSU and his recent results could potentially lead to breakthroughs in p-type conduction in ZnO.

Dr. Parmar has also been working on CdTe semiconductor, characterization defects for photovoltaic applications. Dr. Parmar has considerable familiarity with different UHV thin films growth techniques and standard processes involved in crystal growth facility and clean room microfabrication processes. Dr. Parmar has taught several graduate and under graduate level courses in Physics and Material Science and Engineering at WSU. He is also skilled with the practical knowledge of scientific patent drafting. Dr. Parmar's collaborative research has benefited a number of his colleagues with whom he has worked and his research has resulted in numerous publications in world's prestigious peer reviewed scientific journals. He has also given presentations at national and international scientific conferences. In addition to research, he is serving as an editorial board member for a scientific journal and has been an invited reviewer for a number of international journals. He has been a contributing editor for the Nanotechnology column in **Vacuum Technology and Coating** magazine for the past couple of years.



**Abhijit Biswas, Ph.D., Contributing Editor**

Column: **Photonics and Microelectronics**

One goal of VT&C is to keep readers informed on new and advancing technologies. Nanotech and Biotech Columns were introduced several years ago with great success and we also include papers by guest authors on advanced coating. Building on this, we introduce a new Column by Dr. Biswas, Photonics and Microelectronics, which further broadens the scope of VT&C. These fast growing technologies form the basis for integrating photonic and microelectronic devices. Microelectronics uses vacuum technology for the microfabrication techniques and processes instrumental in creating bioMEMS devices. BioMEMS offers potential for expanding the horizons

and scope in the fast growing microelectronics-photonics integration sector that will impact a vast array of industries. These novel techniques allow researchers to create a more physiologically relevant environment, promoting new devices for life saving or enhancing applications. Proof-of-concept bioMEMS devices must be tested for the operational reliability for these technologically significant devices. Addressed is the need for simplifying and standardizing BioMEMS tools. The BioMEMS field is growing rapidly, and we anticipate practical applications of BioMEMS devices soon. This keeps VT&C readers aware of new developments in these technologies. We hope you find this new Column informative and stimulating.



**Megha Agrawal, Ph.D., Contributing Editor**

Column: **Vacuum Advances in Biotechnology**

Dr. Megha Agrawal received her Ph.D. in Biotechnology from the Indian Institute of Technology at Roorkee, which is one of the premier institutions in India with an outstanding reputation across the globe. She won a highly competitive research award given by the Council of Scientific and Industrial Research in India to carry out her PhD work. Dr. Agrawal's research on resveratrol has provided novel pathways to develop new therapeutics to combat neurodegenerative disorders. During an active research career of more than a decade, Dr. Agrawal has made significant contributions to develop a rapid, cost effective and more sensitive mechanism based in-vitro model of ischemic stroke as first tier of screening of neuroprotective drugs for their anti-stroke potential. Her research has impacted significantly to initiate new areas in neurodegeneration, neuroprotection and novel approaches to treat cerebral stroke related injuries and prevention. Currently, she is a Research Assistant Professor of Biology at the University

of Arkansas at Little Rock (UALR) in the United States. Based on her international reputation, she was awarded a corporate grant to support her research in neuroscience at UALR. Prior to joining UALR, she worked as a scientist in the School of Medicine at the University of Florida at Gainesville and later at the Children's National Medical Center in Washington DC, where she worked on how placental derived hormones affect neurodevelopment. Dr. Agrawal's research has been well cited. She has published in internationally prestigious scientific journals in the field of biotechnology, neuroscience, stroke and molecular biology and biochemistry. She has also been invited to give several talks at national and international meetings. Besides research, she has considerable experience in writing research grant proposals and has been an invited reviewer for a number of international journals in medicine, neuroscience and biology. Dr. Agrawal also serves as an Editorial Board Member for 'Frontiers in Molecular Bioscience', a Nature-Frontier publishing group.



**Shyamasri Biswas, Ph.D., Contributing Editor**

Column: **Vacuum Advances in Biotechnology**

Dr. Shyamasri Biswas received her Ph.D. in Biotechnology jointly from Banaras Hindu University, India and the University of Potsdam in Germany in 2003. She was awarded the prestigious German Academic Exchange Service (DAAD) sandwich model international scholarship and carried out her Ph.D. thesis work in the Department of Physical Biochemistry at the University of Potsdam, Germany. She also received the Council for Scientific and Industrial Research fellowship in India. Dr. Biswas has held research positions in protein biochemistry, structural biology, biotechnology and molecular biology at top-tier US institutions. Her most recent affiliation has been

with the University of Florida where she has worked as a postdoctoral scientist in the Department of Biochemistry and Molecular Biology. Dr. Biswas has published over twenty peer-reviewed research papers in prestigious international journals in the field of biotechnology that include Nature Structural Biology, Journal of Biological Chemistry, Structure and Biochemistry. She has also given several talks at national and international meetings and has been an invited reviewer for a number of international journals. Dr Biswas has used high vacuum and ultra-high vacuum synchrotron facilities for her protein crystallography work. High resolution protein structures were solved using synchrotron light source which facilitated drug design against clinically relevant proteins. In addition she has also utilized low vacuum equipment like mass spectrometer, FPLC and CD for characterization of proteins.

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# New for SVC Exhibitors! March 2020 Product Showcase

**PRODUCT SHOWCASE**

**Vacuum Hardware: Valves, Chambers, Feedthroughs, Seals, Flanges, Fittings & Related Components**

Compiled by Terence Thompson, Technical Editor  
 email: tethompson@vtcmag.com

**Product Descriptions**

This product showcase includes valves, chambers, feedthroughs, seals, flanges, fittings, handling manipulation equipment, coils, adapters, bellows, nozzles, traps, piping and related hardware.

**ANCORP's Patented XI Ball Valve** Uses Design Exceeds Customer Expectations

Nothing is more frustrating or costly than equipment failure and downtime. Your system has to be exact, your labor is waiting, and your process is on hold—all of which waste time and money. In a recent testimonial from CyOptics, they stated that ANCORP's patented XI Ball Valve design "completely eliminated the costly failure mode, resulting in significant cost savings and increased equipment uptime. The XI ball valve design has exceeded our expectations; we are extremely pleased with its performance." In short, the XI ball valve reduces maintenance, downtime, and increases throughput. It's one of the many reasons ANCORP remains the leading innovator in high vacuum ball valves. Choose ANCORP's Patented XI Ball Valves—Dependable, Durable and Fully Stabilized Stem Design for top performing systems.

**A Wide Range of Flanges, Fittings, Gaskets, Fasteners, Feedthroughs, Angle & In-line Valves**

**Densley's Stockroom Corp.** offers a wide range of flanges (Carbon, KF, ISO), fittings (spheres, elbows, tees, cross-tees), adapters, bellows, ventports, gaskets (copper, Viton®), fasteners (clamps, bolts, nuts, washers), feed-through (high voltage, high current, rotary motion), all-metal valves (variable load, manual, angle and solenoid valves in both sealed gas valves). In addition, we provide valves and brass valves in stock.

**ERARA Technologies, Inc.**  
 10000 S. 10th Ave., Suite 100  
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 Tel: 480-444-8811 or 1-800-535-5176  
 Email: info@erara.com

**Densley's Stockroom Corp.**  
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 Tel: 1-800-444-8811 or 1-450-968-0811  
 Email: info@densley.com

**ERARA Turbomolecular Pumps**

ERARA Technologies, Inc. offers one of the widest selections of turbomolecular pumps on the market today with pump speeds from 70 - 3,000 L/S. ERARA offers two complete lines of turbomolecular pumps: the EMT Series and the EHT Series for high vacuum applications. The EMT Series consists of mechanical bearing compressed molecular pumps. The EHT Series consists of mechanical bearing compressed molecular pumps. The EHT Series offers the most precise of engineering, turbomolecular pumps: temperature-controlled, corrosion resistant, ultra-low vibration, radiation resistant and ultra-high vacuum. All ERARA pumps for turbo pumps feature a wide pressure range with maximum back pressure up to 3 Torr.

**Quartz Crystal Coater** Fil-Tech also supplies electron beam gun replacement parts, crucible liners, gun source parts, Kratos and Hydrovac® flasks for pumps, FT700 and FT100, ion and thermocouple gauges, and Alkali and Varion style leak detector flasks.

**Fil-Tech's NEW Quartz Crystal Coater & Sewer Hardware** from Fil-Tech is our NEW 2019 Catalog. Introducing our new QB100 Quartz Crystal Coater that holds 6 crystals to rotate a new crystal into position for sputter-deposition monitoring. QB100 is competitively priced at \$12,000, has a flat or 45° angle head, and operates to 300°C with efficient cooling. We have a complete line of single and dual sensor heads with stainless steel and copper. We offer stainless steel thickness monitors including the SQM-220, SQM-240, and SQM-250. We supply electron beam gun parts for Laminate and Fil-Tech and replacement parts for Veeco Comstar® Mark I and II and Ion Tech and Sordani ion sources. Fil-Tech manufactures Quality Crystals in 6MHz and 5MHz styles with Gold, Longer Life Gold®, Stress Relieving Alloy®, and Extreme Temperature Crystals.

**Extreme Temperature Crystals™ from Fil-Tech**

Our NEW Extreme Temperature Crystals that are stable in 2000°C range. Our Extreme Temperature Crystals operate in the 2000°C range with lower rate and higher life than standard film monitors and controllers. They are available in Gold, Silver and Stress Relieving Alloy® coatings. Extreme Temperature crystals are ideal for processing utilizing excessive heat including V2 O5 (VPO) and AlN. Contact Fil-Tech for samples. We have a complete line of Al-Coat (6MHz) and 5MHz Quality Crystals in Gold, Longer Life Gold®, and Stress Relieving Alloy® to measure your film films. We also manufacture source head hardware including single and dual feedthroughs on 1" bolts or 2-3/4" flanges, single and dual sensor heads, and quartz heads in stainless steel and Copper.

**SQM-220 Rate Thickness Monitor from Fil-Tech is our NEW 2019 Catalog**

Fil-Tech's SQM-220 Rate Thickness Monitor Controller controls up to 1000 sputter heads and up to 200 crystal heads. The SQM-220 is designed for active vacuum gauges. The SQM-220 communicates with RS232C-RTS or Ethernet IP. Fil-Tech also supplies sensor heads, feedthroughs, oscillators and cables for thin film monitors. Fil-Tech manufactures 6MHz and 5MHz Quality Quartz Crystals coated Gold, Longer Life Gold®, and Stress Relieving Alloy®. Fil-Tech manufactures all sizes single and dual sensor heads, feedthroughs on 1" bolts and 2-3/4" flanges, and custom hardware. Try our sensor head to support the superior coating. Introducing Fil-Tech's NEW.

**ERARA Technologies, Inc.**  
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**Enhanced Filaments for Alkali Leak Detectors**

**Fil-Tech's NEW FT700, FT100, and FT150** offer both 6 and 12 inch diameter. The FT700 and FT100 are designed for use with pumps up to 100 L/S. The FT150 is designed for use with pumps up to 150 L/S. The FT700 and FT100 are designed for use with pumps up to 100 L/S. The FT150 is designed for use with pumps up to 150 L/S. The FT700 and FT100 are designed for use with pumps up to 100 L/S. The FT150 is designed for use with pumps up to 150 L/S.

**Fil-Tech's Vacuum Measurement Gauges**

Fil-Tech offers a complete line of vacuum gauges including ionization gauges, thermocouple gauges, and Penning gauges. We have a complete line of ionization gauges including the IQM-100, IQM-200, and IQM-300. We also have a complete line of thermocouple gauges including the TCM-100, TCM-200, and TCM-300. We also have a complete line of Penning gauges including the PGM-100, PGM-200, and PGM-300.

**OHM Multi-Purpose Insulators for Gas Handling**

Our new OHM Multi-Purpose Insulators are designed for use in high vacuum environments. They are made of high purity alumina and are available in a variety of sizes and configurations. They are ideal for use in gas handling applications where high vacuum and high temperature are required.

**Sublimation Seal Fil-Tech**

Fil-Tech offers a complete line of sublimation seals for use in high vacuum environments. They are made of high purity alumina and are available in a variety of sizes and configurations. They are ideal for use in sublimation applications where high vacuum and high temperature are required.

**Terence Thompson**  
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 Email: info@vtcmag.com

100 word Product Showcase with color photo and booth number.

Contact **Gregg Hutchings** for further information  
 Phone: 1-203-606-5773 | E-mail: Gregg@vtcmag.com

# VTCMAG.COM BANNER POSITION & SPECIFICATIONS



BANNER				
A	B	C	D	E
POSITION				
Top of page Leaderboard	Recent Article Leaderboard	Industry News Skyscraper	Featured Showcase (Left) Square	Featured Showcase (Right) Square
DIMENSIONS (px)				
728 x 90	728 x 90	160x 400	400 x 250	400 x 250
COST				
\$1200	\$1000	\$1000	\$400	\$400
FREQUENCY				
Per Month	Per Month	Per Month	Per Month	Per Month
ROTATION				
7 Banners (Max)	3 Banners (Max)	3 Banners (Max)	3 Banners (Max)	3 Banners (Max)

# VACUUM TECHNOLOGY & COATING'S 2020 PRODUCT SHOWCASE & EDITORIAL CALENDAR

January 2020, subject to change

ISSUE DATE	PRODUCT SHOWCASE/EDITORIAL FEATURE
<b>January 2020</b>	<b>Heaters, Furnaces, Ovens, Chillers, Coolers, Accessories and Services for Vacuum Processing</b> Showcase describes furnaces, heaters, ovens, chillers, coolers, cryotrap, cryopumps and related products including cold boxes, cold cabinets, cold traps, connectors, cryocoolers, cryogenerators, cryostats, dewars, fittings, heater modules, heat exchangers, liquefiers, etc. for a wide variety of vacuum-centric process applications.
<b>February 2020</b>	<b>Deposition, Coating, Cleaning &amp; Etching Processing Equipment</b> Includes sputtering, evaporation and coating plus plasma cleaning and etching systems.
<b>March 2020</b> <i>SVC TechCon</i>	<b>SVC Special Showcase Issue</b> Includes: photo, headline, 100 words of text, contact information (company name, contact, phone, email and website)
<b>April 2020</b>	<b>Vacuum Hardware: Valves, Chambers, Feedthroughs, Seals, Flanges, Fittings &amp; Related Component</b> Includes valves, chambers, feedthroughs, seals, flanges, fittings, handling-manipulation equipment, collars, adaptors, bellows, viewports, traps, piping and other related hardware.
<b>May 2020</b>	<b>Power Supplies, RF Generators &amp; Accessories for Vacuum Thin-Film Deposition and Coating</b> Includes power supplies used in a wide variety of vacuum-based production deposition and coating applications.
<b>June 2020</b> <i>Semicon West</i>	<b>Materials: Oils, Fluids, Gases, Chemicals &amp; Lubricants</b> Includes vacuum fluids, oils, lubricants, metals, ceramics, chemicals, gases and other materials used in vacuum processing equipment operation, installation and maintenance. <b>Note:</b> Deposition & Evaporation Sources & Materials will be covered in September 2019
<b>July 2020</b>	<b>Thin-Film Deposition Rate Monitors &amp; Controllers</b> Describes thin-film deposition rate and thickness monitors, optical monitors, etch monitors, deposition controllers, quartz crystals sensors, and related products.
<b>August 2020</b>	<b>Gas Analytical Systems, Instrumentation, Metrology, Control, Handling &amp; Distribution</b> Gas analytical instrumentation for production, R&D and other vacuum applications: sophisticated gas analytical systems and subsystems/accessories/components including MFCs, RGAs, vacuum gauges, leak detectors, mass spectrometers and gas chromatography systems. Includes cabinets, piping, manifolds, purification and distribution of high-purity gases as well as exhaust conditioning and gas scrubbers for production, IC fab and R&D processes.
<b>September 2020</b> <i>AVS Symposium</i>	<b>Deposition &amp; Evaporation Sources and Materials</b> Includes sputtering targets, evaporation sources, ion sources, cathodes, coatings and other materials used for various deposition and coating applications.
<b>October 2020</b> <i>MRS Fall Meeting</i>	<b>Deposition, Coating, Cleaning &amp; Etching Vacuum Processing Equipment</b> Includes sputtering, evaporation and coating plus plasma cleaning and etching systems.
<b>November 2020</b>	<b>Thin &amp; Thick Film Metrology, Measurement, Characterization &amp; Surface Analysis Equipment</b> Includes thickness, flatness and hardness testers, surface science analysis, ellipsometers, spectrometers, thin film characterization/uniformity testers, surface profilers, film stress analysis and related instrumentation/metrology products.
<b>December 2020</b>	<b>Vacuum Pumps</b> Covers the wide variety of roughing pumps, high-vacuum pumps, very-high-vacuum pumps, cryopumps including vacuum pumps used in all manufacturing processes and R&D applications.

Product Showcase listings: \$395 per product listing, contact us to see if you qualify for a discounted rate.

**Product Submissions & Information for VT&C Product Showcases**

Terrence Thompson, Technical Editor

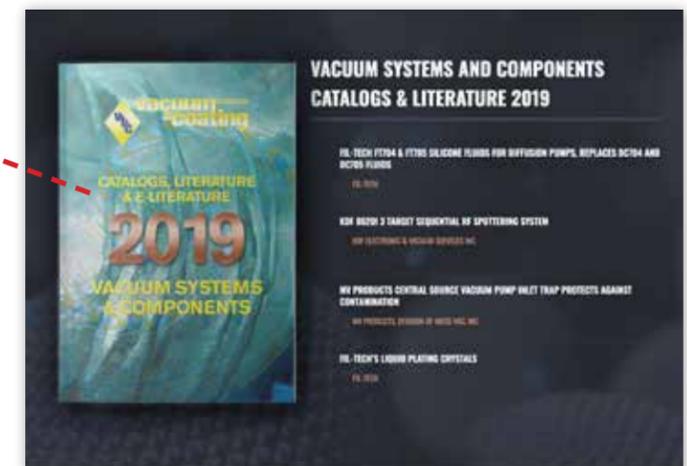
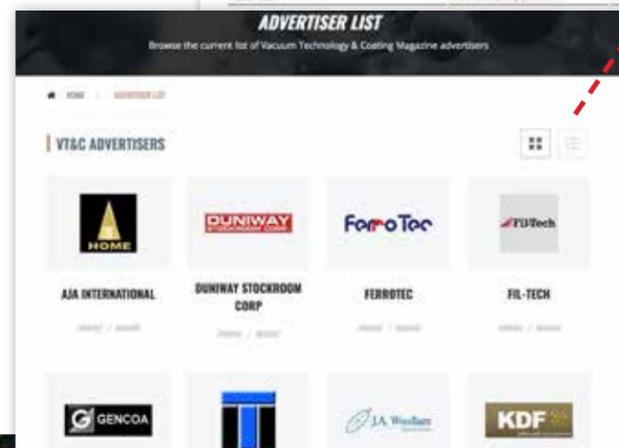
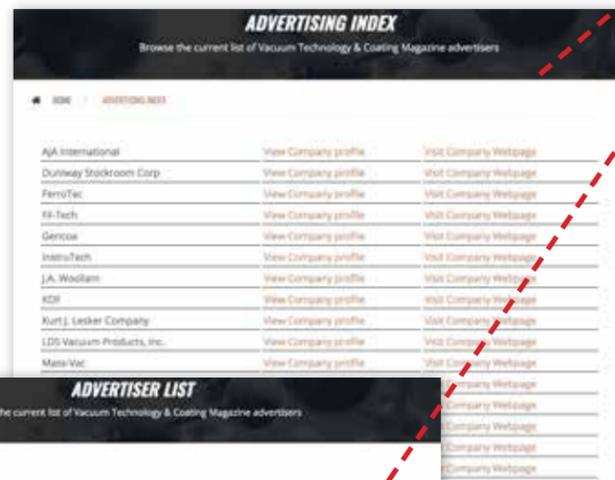
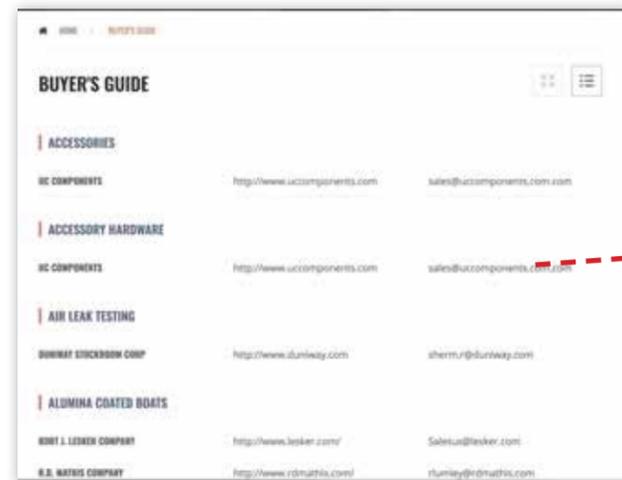
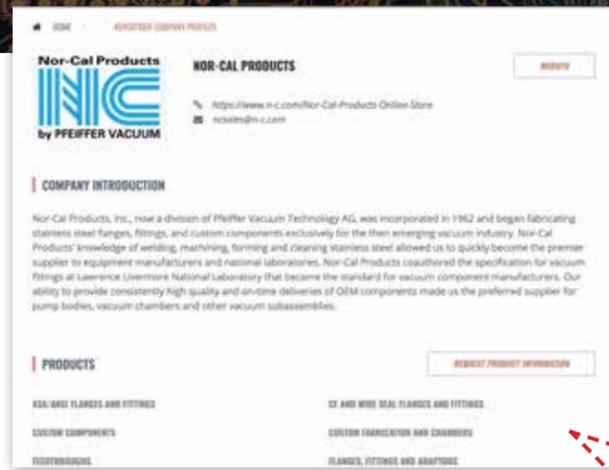
Phone: 1-847-515-1255 • E-mail: tethompson@aol.com

For more information contact Gregg Hutchings  
Phone: 1-203-606-5773 | E-mail: Gregg@vtcmag.com

# ONLINE-PRINT VALUE PROGRAM

Typical ad stats report

March 2019	Total	Company
<b>Profile Views</b> VTCMag.com users that clicked to view the company's profile page	8452	443
<b>Website Clicks From Profile</b> VTCMag.com users that clicked the company website link from the VT&C profile page	43	9
<b>Website Clicks from Buyer's Guide</b> VTCMag.com users that clicked the company website link from the VT&C Buyer's Guide Page	7813	401
<b>Website Click from Ad List</b> VTCMag.com users that clicked the company website link from the Ad List Page	1138	40
<b>Clicks from Product Showcase</b> VTCMag.com users that clicked the company product showcase listings	5593	185
<b>Website Click from March Digital Magazine</b> Visitors to the Digital Magazine that clicked the company print ad	274	21
<b>Website Click from Catalog &amp; Literature</b> VTCMag.com users that clicked the company website link from the Catalog & Literature listings	246	NA
<b>Web Banner Activity</b>		
Jan-2019		Impressions 52,287 / Clicks 41
Feb-2019		Impressions 32,941 / Clicks 44
Mar-2019		Impressions 31,061 / Clicks 34



# Introducing the NEW 444Plus 1-Year Program

(package price)

Included in the program is the choice of:

- 4 1/4 pg ads .....\$10,000 Gross
- 4 1/3 pg ads .....\$13,000 Gross
- 4 1/2 pg ads .....\$16,000 Gross

What you get:

- Each package includes 4 months of banner advertising in either the leaderboard or skyscraper banner positions
- 4 Product Showcase listings in the months related to the company's products/services
- Company profile in the VTCMag.com Advertiser List and Index, Company listing in the Buyer's Guide, and activity tracking.

## Online-Print Value Program

Typical ad stats report

March 2019		Total	Company
<b>Profile Views</b>	VTCMag.com users that clicked to view the company's profile page	8452	443
<b>Website Clicks From Profile</b>	VTCMag.com users that clicked the company website link from the VT&C profile page	43	9
<b>Website Clicks from Buyer's Guide</b>	VTCMag.com users that clicked the company website link from the VT&C Buyer's Guide Page	7813	401
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<b>Website Click from Catalog &amp; Literature</b>	VTCMag.com users that clicked the company website link from the Catalog & Literature listings	246	NA
<b>Web Banner Activity</b>			
	Jan-2019		Impressions 52,237 / Clicks 41
	Feb-2019		Impressions 32,941 / Clicks 44
	Mar-2019		Impressions 31,061 / Clicks 34

To qualify for the Buyer's Guide Print & Online Program you must:

- Advertise 3x or more with 1/2 page print ads or larger
- OR 4x or more for 1/3 page or 1/4 page print ads

What you get:

- No Charge for print Product Showcase Listings
- Eligible for Product Showcase Listings in Featured Showcases section on VTCMag.com
- Online Buyer's Guide Listings
- Company profile on VT&C online Profile page
- Listings on our Ad List and Ad Index webpages
- Ad stats reports

## PRINT AD RATES (EFFECTIVE NOVEMBER 1, 2019)

		1 TIME	3 TIMES	6 TIMES	9 TIMES	12 TIMES	24 TIMES
<b>FULL PAGE</b>	<b>4 color</b>	\$6,200 Gross	\$6,000 Gross	\$5550 Gross	\$5,520 Gross	\$5,400 Gross	\$5,350 Gross
<b>1/2 ISLAND</b>	<b>4 color</b>	\$4,900 Gross	\$4,700 Gross	\$4,500 Gross	\$4,400 Gross	\$4,200 Gross	\$3,900 Gross
<b>1/2 PAGE</b>	<b>4 color</b>	\$3,900 Gross	\$3,800 Gross	\$3,665 Gross	\$3,500 Gross	\$3,450 Gross	\$3,400 Gross
<b>1/3 PAGE</b>	<b>4 color</b>	\$2,990 Gross	\$2,950 Gross	\$2,800 Gross	\$2,750 Gross	\$2,650 Gross	\$2,550 Gross
<b>1/4 PAGE</b>	<b>4 color</b>	\$2,200 Gross	\$2,080 Gross	\$2,020 Gross	\$2,000 Gross	\$1,970 Gross	\$1,950 Gross

## PRINT AD SPECIFICATIONS

STANDARD AD SIZE	WIDTH*	×	DEPTH*
<b>FULL PAGE (BLEED):</b>	Bleed Size:	8 1/8	11 1/8
	Trim Size:	7 7/8	10 7/8
	† Safety:	3/8 from trim on all sides	
<b>FULL PAGE (NON-BLEED):</b>		7	10
<b>‡ 2/3 PAGE (NON-BLEED):</b>		4 1/2	10
<b>‡ 2/3 PAGE (BLEED):</b>		5 1/8	11 1/8
<b>‡ 1/2 PG ISLAND:</b>		4 1/2	7 3/8
<b>1/2 PAGE VERTICAL:</b>		3 3/8	10
<b>1/2 PAGE HORIZONTAL:</b>		7	4 7/8
<b>(NON-BLEED)</b>			
<b>1/2 PAGE HORIZONTAL:</b>		7 7/8	5 7/16
<b>(BLEED)</b>		(Trim plus 1/8 all around for bleed)	
		† Safety = 7 × 4 7/8 centered within 7 7/8 × 5 7/16	
<b>1/3 PAGE VERTICAL:</b>		2 3/16	10
<b>1/3 PAGE HORIZONTAL:</b>		4 5/8	4 7/8
<b>1/4 PAGE:</b>		3 1/2	4 7/8

\*Standard ad sizes in inches. †Live matter: For safety, keep at least .375" from trim.

‡Please contact Andrew Cowan for further information

For all production related questions please e-mail or call our production department:  
E-mail: [sue@taube-violante.com](mailto:sue@taube-violante.com)  
Phone: 203-849-8200

### MATERIAL HANDLING:

E-mail preferred, for very large ad material, please contact Production for FTP instructions.

Please Note: All PRINT material to be provided as CMYK files. Any print ad materials provided with PMS or RGB color(s) will be converted to CMYK. Publisher not responsible for match colors.

### PRODUCTION DEPARTMENT:

(Insertion Orders AND Material)

Sue Taube | Art Director/Production Manager  
Phone: 1-203-849-8200  
E-mail: [sue@taube-violante.com](mailto:sue@taube-violante.com)

### ADVERTISING SALES:

Gregg Hutchings | Sales  
Phone: 1-203-606-5773  
E-mail: [Gregg@vtcmag.com](mailto:Gregg@vtcmag.com)

### BUSINESS OFFICE:

(Insertion Orders/Correspondence)

Andrew Cowan | Associate Publisher  
Phone: 1-336-432-9627  
E-mail: [andrew@vtcmag.com](mailto:andrew@vtcmag.com)