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’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, Sercor, Nor-Cal Products, Leybold USA, Pfeiffer Vacuum Inc., AccuGlass Products Inc., Fi-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 cornerstone 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.

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. Manufacturers 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.
Dr. Shigel Kumar Parmar is a Researcher at the Smart Materials Foundation in the Netherlands. He has presented numerous papers at international conferences. He is skilled with the practical knowledge of scientific patent drafting. Dr. Parmar's current research interests include fabrication and characterization of mechanical, chemical, and biological properties of materials for sustainable energy and materials for biomedical applications and nanotechnology. He is a member of the editorial board of Vacuum Science and Technology and Journal of Advanced Materials.

BioMEMS devices are key to the future of microtechnology. It is a rapidly growing area with many potential applications in medicine, biology, and electronics. Dr. Parmar's research is focused on the development of materials and processes for the fabrication of functional microdevices. He is interested in the use of these devices for medical and biological applications, such as tissue engineering and drug delivery systems.

Dr. Parmar has published over 100 papers in international journals and has presented several papers at international conferences. He is a member of the editorial boards of several scientific journals and is a member of the American Vacuum Society and the International Union of Vacuum Science and Technology. He has been an invited speaker and plenary lecturer at numerous conferences and workshops.

Dr. Parmar's research is supported by grants from the National Science Foundation and the Department of Energy. He is also involved in several collaborative projects with industry partners.

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Megha Agarwal, Ph.D., Contributing Editor

Columns: *Vacuum Advances in Biotechnology*

Dr. Megha Agarwal 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 Ph.D. work. Dr. Agarwal’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. Agarwal has made significant contributions to develop a rapid, cost-effective and more sensitive mechanism based in-vitro model of ischemic stroke as a 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. Agarwal’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 biochemistry. Dr. Agarwal also serves as an Editorial Board Member for ‘Frontiers in Molecular Biosciences’, a Nature-Frontier publishing group.

Shyamauli Biswas, Ph.D., Contributing Editor

Columns: *Vacuum Advances in Biotechnology*

Dr. Shyamauli 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 sources 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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### 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
VTMAG.COM BANNER POSITION & SPECIFICATIONS

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

www.vtcmag.com

VACUUM TECHNOLOGY & COATING’S 2020 PRODUCT SHOWCASE & EDITORIAL CALENDAR

January 2020, subject to change

<table>
<thead>
<tr>
<th>ISSUE</th>
<th>DATE</th>
<th>PRODUCT SHOWCASE/EDITORIAL FEATURE</th>
</tr>
</thead>
<tbody>
<tr>
<td>January 2020</td>
<td>Heaters, Furnaces, Ovens, Chillers, Coolers, Accessories and Services for Vacuum Processing Showcases describes furnaces, heaters, ovens, chillers, coolers, cryotraps, cryopumps and related products including cold boxes, cold cabinets, cold traps, connectors, cryocoolers, cryogenimeters, crystals, dewars, fittings, heater modules, heat exchangers, liqueifiers, etc. for a wide variety of vacuum-centric process applications.</td>
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<tr>
<td>February 2020</td>
<td>Deposition, Coating, Cleaning &amp; Etching Processing Equipment Includes sputtering, evaporation and coating plus plasma cleaning and etching systems.</td>
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<tr>
<td>March 2020 SVC TechCon SVC Special Showcase Issue Includes photos, headline, 100 words of text, contact information (company name, contact, phone, email and website)</td>
<td></td>
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<tr>
<td>April 2020</td>
<td>Vacuum Hardware: Valves, Chambers, Feedthroughs, Seals, Flanges, Fittings &amp; Related Component Includes valves, chambers, feedthroughs, seals, flanges, fittings, handling manipulation equipment, collars, adapters, bellows, viewport, traps, piping and other related hardware.</td>
<td></td>
</tr>
<tr>
<td>May 2020</td>
<td>Power Supplies, RF Generators &amp; Accessories for Vacuum Thin-Film Deposition and Coating Includes power supplies used in a wide variety of vacuum-based production deposition and coating applications.</td>
<td></td>
</tr>
<tr>
<td>June 2020 Semicon West Materials: Oils, Fluids, Gases, Chemicals &amp; Lubricants Includes vacuum fluids, oils, lubricants, metals, ceramics, chemicals, gases and other materials used in vacuum processing equipment operation, installation and maintenance. Note: Deposition &amp; Evaporation Sources &amp; Materials will be covered in September 2019</td>
<td></td>
<td></td>
</tr>
<tr>
<td>July 2020</td>
<td>Thin-Film Deposition Rate Monitors &amp; Controllers Describes thin-film deposition rate and thickness monitors, optical monitors, etch monitors, deposition controllers, quartz crystal sensors, and related products.</td>
<td></td>
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<tr>
<td>August 2020</td>
<td>Gas Analytical Systems, Instrumentation, Metrology, Control, Handling &amp; Distribution Gas analytical instrumentation for production, R&amp;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&amp;D processes.</td>
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<tr>
<td>September 2020 AVS Symposium Deposition &amp; Evaporation Sources and Materials Includes sputtering targets, evaporation sources, ion sources, cathodes, coatings and other materials used for various deposition and coating applications.</td>
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<tr>
<td>October 2020 MRS Fall Meeting Deposition, Coating, Cleaning &amp; Etching Vacuum Processing Equipment Includes sputtering, evaporation and coating plus plasma cleaning and etching systems.</td>
<td></td>
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<tr>
<td>December 2020</td>
<td>Vacuum Pumps 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&amp;D applications.</td>
<td></td>
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</tbody>
</table>

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

www.vtcmag.com
### March 2019

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<tr>
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<td>21</td>
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<td>246</td>
<td>NA</td>
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</tbody>
</table>

#### Profile Views
VTCMag.com users that clicked to view the company's profile page.

#### Website Clicks From Profile
VTCMag.com users that clicked the company website link from the VTC profile page.

#### Website Clicks from Buyer's Guide
VTCMag.com users that clicked the company website link from the VTC Buyer's Guide Page.

#### Website Click from Ad List
VTCMag.com users that clicked the company website link from the Ad List Page.

#### Clicks from Product Showcase
VTCMag.com users that clicked the company product showcase listings.

#### Website Click from March Digital Magazine
Visitors to the Digital Magazine that clicked the company print ad.

#### Website Click from Catalog & Literature
VTCMag.com users that clicked the company website link from the Catalog & Literature listings.

### Web Banner Activity

<table>
<thead>
<tr>
<th>Month</th>
<th>Impressions</th>
<th>Clicks</th>
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<tr>
<td>Jan-19</td>
<td>33,364</td>
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<td>Feb-19</td>
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<td>Mar-19</td>
<td>31,061</td>
<td>34</td>
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</tbody>
</table>

[www.vtcmag.com]
**Online-Print Value Program**

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

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**Print Ad Rates** *(Effective November 1, 2019)*

<table>
<thead>
<tr>
<th>Package</th>
<th>1 TIME</th>
<th>3 TIMES</th>
<th>6 TIMES</th>
<th>9 TIMES</th>
<th>12 TIMES</th>
<th>24 TIMES</th>
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<tbody>
<tr>
<td>4 color</td>
<td>$6,200 Gross</td>
<td>$6,000 Gross</td>
<td>$5,550 Gross</td>
<td>$5,520 Gross</td>
<td>$5,400 Gross</td>
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<td>$4,700 Gross</td>
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<td>$2,950 Gross</td>
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<td>$2,750 Gross</td>
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<tr>
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**Print Ad Specifications**

*Standard ad sizes in inches.* †Live matter: For safety, keep at least .375” from trim.
‡Please contact Andrew Cowan for further information.

**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.

**ADVERTISING SALES:**
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E-mail: Gregg@vtcmag.com

**BUSINESS OFFICE:**
Andrew Cowan | Associate Publisher
Phone: 1-336-432-9627
E-mail: andrew@vtcmag.com

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**Web Banner Activity**

| Jan 2019 | impressions 52,237 / Clicks 01 |
| Feb 2019 | impressions 32,077 / Clicks 01 |
| Mar 2019 | impressions 51,361 / Clicks 01 |

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