



# Society of Vacuum Coaters [SVC]

**Our Organization:** SVC is a non-profit, international, professional organization primarily devoted to coating and surface finishing using vacuum processes. Our organization consists of industry, academia and members from national research laboratories. Our industry membership includes coating companies, materials suppliers, process designers, equipment manufacturers. Our industry applies coatings and treatments to a wide variety of consumer and industrial products in all business sectors.

**Our Mission:** To promote technical excellence by providing a global organization to inform, educate, and engage the members, the technical community, and the public on all aspects of vacuum coating, surface engineering and related technologies. Further details are at the SVC website: [www.svc.org](http://www.svc.org).

- SVC has an annual **Technical Conference & Exhibition (TechCon)** and publishes presented papers in the TechCon Technical Proceedings. The SVC Exhibition has over 175 participating companies with individual and organization attendance from over 35 countries. SVC also participates in other related conferences.
- SVC publishes the **SVC Bulletin** with popular articles and news of the industry. We also publish the online **SVCconnections** with industry news and **TechTalk** providing a forum for our Corporate Sponsors.
- SVC offers **educational courses and webinars** on coatings and related processes.
- SVC offers **publications and books** on coating research and engineering.
- SVC members receive **discounts** on the TechCon registration, courses and on all publications.
- The SVC Foundation offers **scholarships** and TechCon travel sponsorships to students.

## Applications of Vacuum Coating include:

- **Coatings for biomedical and environmental applications** – antimicrobial, smart bandages and coatings for medical and dental implants
- **Coatings for energy conversion** – energy harvesting, solar cells, batteries, fuel cells, and smart windows
- **Optical coatings** for optical elements ranging from telescopes to optoelectronics. Also, coatings for anti-counterfeiting and for large area glass and roll-to-roll plastics
- **Electronic coatings** for touchscreens, transparent conductors, semiconductors and dielectrics
- **Protective, tribological and decorative coatings** – wear and lubrication coatings for engines and decorative coatings for hardware and fixtures
- **Coatings for roll-to-roll flexible glass and plastics** – wearable electronics, transparent electrical conductors (TCO), antistatic coatings, and flexible touchscreens and displays
- **Thermal control coatings** – thermal barriers, anti-reflective coatings, and selective solar absorbers
- **Packaging** – barrier layers to reduce water vapor and oxygen transmission rates in food packaging. Also, hydrophobic and hydrophilic surface applications
- **Base coats for other coatings** such as electroplating
- **Coatings for large area glass and metals**

## Process technologies include, but are not limited to:

- PVD (physical vapor deposition–evaporation and sputtering)
- CVD (chemical vapor deposition) and PECVD (plasma-enhanced chemical vapor deposition)
- IBD (ion beam deposition)
- Atmospheric plasmas
- ALD (atomic layer deposition)
- MBE (molecular beam epitaxy)