



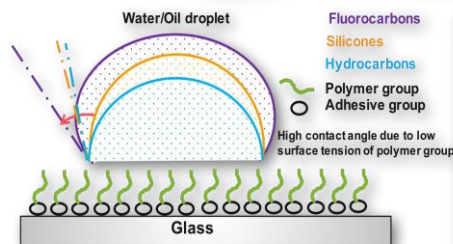
## Amphiphobic Coatings for Easy-to-Clean Surfaces

Presentation by Bernard Coll

Wednesday, May 22, 2019, 6:30 p.m.

Dinner is Included

Sponsored by The Southern California Chapter of the AVS



### Synopsis

With the ever-growing usage of hand-held electronic devices and touch-screen displays, keeping surfaces free of fingerprints and oil residues – as well as making them easier to clean – is an active field of research and technology development. The success of easy-to-clean (ETC) surfaces deals with the formulation, design, and deposition of low surface energy amphiphobic coatings that repel both water and oil.

Currently, commercial ETC coatings are applied from the liquid phase by spraying and dipping. While they are commercially available technologies, these coatings don't meet optical clarity and aging requirements. To address these needs, Von Ardenne is developing economical and reliable coating systems and procedures, taking into account not only the hydro/oleophobicity function, but also long-term durability. The technology is based upon vacuum thermal evaporation of fluoro-silicon materials, producing ultra-thin (~10nm) defect-free, uniform and optically clear coatings well bonded to AR coated glass surfaces.

In this talk, recent trends in the development of durable and environmentally resistant vacuum deposited ETC coatings will be discussed. Their performance will be reviewed and compared to alternative commercially available products.

### Our Speaker



Bernard is a Sr. Applications Development Engineer at Von Ardenne North America in Phoenix AZ. He obtained his Dipl.-Ing. in nuclear physics and mechanical engineering in

France, after which he pioneered hard and wear resistant coatings specializing in vacuum arc and other PVD/PECVD techniques. He then joined IonBond in the U.S. to develop DLC by filtered arc technology. In 1994, he joined Motorola to develop NEA thin films and CNT for field-electron emission displays. He led Motorola Labs' Display R & D group specializing in novel functional materials for visual displays and optics for mobile applications. He was named Distinguished and Master Innovator by Motorola in 2003 and 2009. His extensive experience in semiconductor processing, display technologies and nanotechnology, led him to work in the development of solid state thin films for Lithium ion batteries and Hydrogen storage in various startups from 2011 to 2017 prior to joining Von Ardenne. Bernard holds 43 US patents and has published 45 technical papers.

# Meeting Details

- Date: Wednesday, May 22, 2019
- Location: Holiday Inn – Buena Park, 7000 Beach Blvd, Buena Park, CA 90620  
Ample free parking behind hotel
- Schedule: 6:00 Meet and Greet  
(PM) 6:30 Dinner  
7:00 Presentation  
8:15 End
- Cost: \$25 (\$15 for students) *Advance payment is required.*
- Dinner Choices: Salad, Lemon Herb Chicken Breast, Red Mashed Potatoes, Chocolate Two-Layer Cake, and Beverages (Full bar available for purchase; Vegetarian option available)  
*Cost includes both food and presentation.*
- For additional information, contact us at: [info@sccavs.org](mailto:info@sccavs.org)
- Reservations: You can (1) pay by PayPal to [chair@sccavs.org](mailto:chair@sccavs.org), and email info requested in the Registration Form to [chair@sccavs.org](mailto:chair@sccavs.org), or (2) snail mail a check payable to SCCAVS along with the filled in Registration Form. These must be *received by the deadline of May 17, 2019.*

## Registration Form

**Deadline:** May 17, 2019. Pay by PayPal (to [chair@sccavs.org](mailto:chair@sccavs.org)), or check.

Send check to: SCCAVS, 616 Hartford Ave, Huntington Beach, CA 92648

For additional information, contact: [info@sccavs.org](mailto:info@sccavs.org)

Check enclosed, payable to SCCAVS

Name: \_\_\_\_\_

Company/Org \_\_\_\_\_

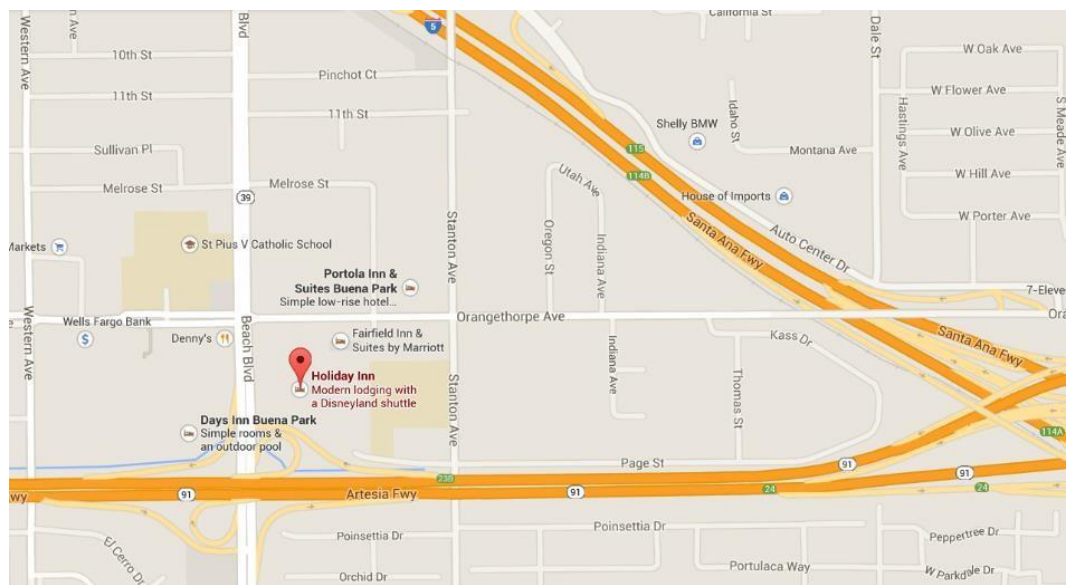
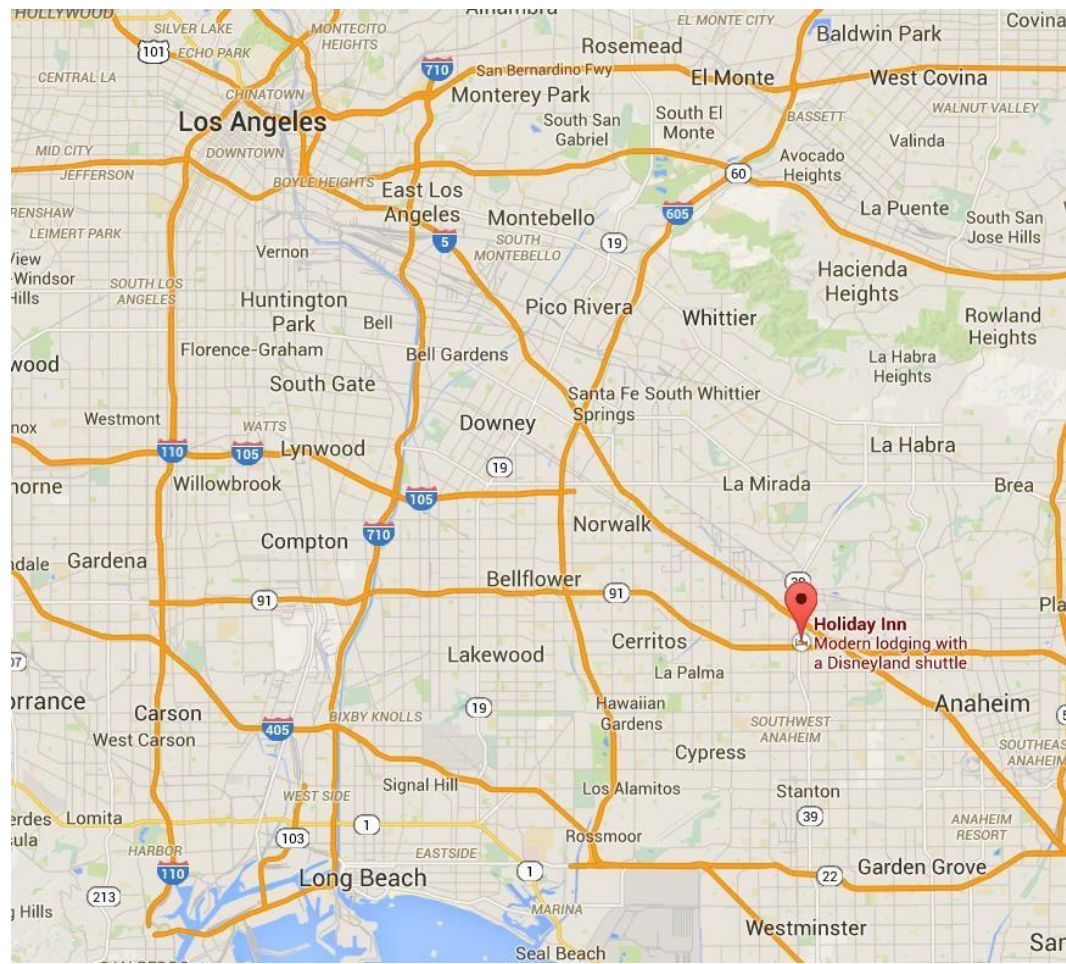
Address, Mail Stop \_\_\_\_\_

City \_\_\_\_\_ State \_\_\_\_\_ Zip \_\_\_\_\_

Phone: \_\_\_\_\_

Email: \_\_\_\_\_

## Directions to Holiday Inn, Buena Park



**Address: 7000 Beach Blvd., Buena Park, CA 90620**

**Phone: 714-522-7000**

**Ample free parking behind hotel**