

SVC Foundation News | Message from the Chair

Thank you! We have many companies, individuals and organizations that support the SVC Foundation (SVCF). Thank you to all who have helped us this year, last year and the years before. Our mission to promote vacuum technology through the support of students has continued through difficult financial times due to the continued support of many of you. A special thank you to the SVC, without whom the Foundation would not exist. The SVC, through matching grants, board support, management support and donations (booth space, etc.) has made it possible for us to continue to grant scholarships to deserving undergraduate and graduate students.

2003 Scholarship Recipients

Simcha Korenbilt, *University of Florida*
John Krassikoff, *University of Maine*

2004 Scholarship Recipients

Allison Caster, *University of South Dakota*
Guillermo Acosta, *Grigham Young University*

2005 Scholarship Recipients

Amit Momaya, *Duke University*
Jian Yang, *Queen's University, Canada*

2006 Scholarship Recipients

Lisa Ann Deibler, *Washington State University*
Yong Yang, *Drexel University, China*

2007 Scholarship Recipients

Nicolas Vickers, *California Polytechnic State University*
Martynas Audronis, *University of Sheffield, United Kingdom*

2008 Scholarship Recipients

Bakhtyar Ali, *University of Delaware*
Michael P. Orthner, *University of Utah*
Jonathan Michael, *Grande Valley State University*

2009 Scholarship Recipients

Emre Yassitepe, *University of Delaware*
Jamie Dougherty, *University of Rochester*
Michael P. Orthner, *University of Utah*

2010 Scholarship Recipients



Jamie Dougherty
University of Rochester



Bakhtyar Ali
University of Delaware



Christopher Bartlow
University of California - Berkeley



Hamidreza Mohseni
University of North Texas



Matthew Parkinson
Rutgers, The State University of New Jersey



Our 2010 5K Run participants

The 5K Run and Golf Tournament

This year at the TechCon in Orlando, we had two major fundraisers. The 5K run has continued with the direction of Wolfgang Decker, SVC Board Representative and SVCF Special Events Co-Chair and again brought out runners and walkers in the early morning for a fun run to support the Foundation. As in years past, the run raised over \$4,000 through entry fees and the generous support of our sponsors:

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SVC Foundation Board of Directors

John Felts, *Chair, Nano Scale Surface Systems, Inc., (510/814-0340; jtfelts@earthlink.net)*

James W. Seeser, *Fundraising Chair, OCLI and JDS Uniphase (retired), (314/918-0160; jseeser@aol.com)*

Steve Sedlak, *Secretary and Special Events Co-Chair, ESK Ceramics - A Ceradyne Company, (800/833-7608; ssedlak@ceradyne.com)*

Paolo Raugei, *Treasurer and Scholarship Committee Co-Chair, Galileo Vacuum Systems, Inc. (678/513-0303; praugei@worldnet.att.net)*

Wolfgang Decker, *5K Run Organizer; SVC Board Representative; VAST FILMS, Ltd.; (724/827-8827; w.decker@vastfilm.com)*

Bryant Hichwa, *SVC Board Representative and Scholarship Committee Co-Chair, Professor Emeritus, Sonoma State University and OCLI; (707/785-1922; bhichwa@earthlink.net)*

Pamela T. Luecke, *Special Events Co-Chair, SAGE industrial sales, inc.; (605/578-1339; pamluecke@aol.com)*

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In addition to the Fun Run, we held the first annual Golf Tournament under the leadership of Pam Luecke, Special Events Co-Chair and SVC Future Sites Chair. We had 24 golfers and raised over \$4,500. We will continue this activity next year at SVC, so please be sure to plan ahead and look for our announcement.

R.D. Mathis – Corporate Event Sponsor
SAGE industrial sales, inc. –

Poker Game on Par 3's Sponsor
Hole in One Sponsor

Hole Sponsors:

- John Felts – Hole #1 and #6
- Jim Seeser – Hole #3
- Solon Specialty Wire – Hole #12
- Midwest Tungsten – Hole #16



On the green in Orlando

We would like to increase the exposure of the SVC Foundation scholarships to as many universities as possible, so we are asking members of the SVC to contact your Alma Mater and direct them to the SVC Foundation Web Site (www.svcfoundation.org) later this year for the scholarship announcement. Also, any members that have students in college studying areas related to vacuum technology should encourage their students to apply! We look forward to hearing from you in the coming weeks and months. We are always looking for volunteers to help with the 5K run and the Golf Tournament and implement new fundraising opportunities.

— John Felts, SVC Foundation Chair

Scholarship Applications

Eligible candidates can apply for SVC Foundation Scholarships between September 1 and January 31 of each calendar year. Visit www.svcfoundation.org for the most current application and qualifying criteria.

Society and Industry News

Solar Market Update: A 2010 Mid-Term Perspective

As the first half of 2010 winds down, it's time to reflect on the first half and peek at the second half.

Anyone who has read my prior updates knows that I consider Greentech Media (Greentechmedia.com) as a credible information source on the solar industry. A recent column of theirs caught my eye and reminded the solar community that sometime this year the total worldwide installed base of PV will cross the 10 gigawatt threshold. Given that the total base in 2000 was 170 mega-watts, this is quite an achievement! A CAGR of about 50% is an enviable one that all those associated with the industry should feel good about. Yes, it dwarfs fossil-fuel production of power, but I (as well as others), am convinced that the combination of environmental awareness, lower installed costs and halting steps toward a Federal energy policy will continue to drive future growth. I am betting on a lower but still extraordinary growth curve over the next 10 years!

The US Market continues to boom, much to the surprise of many of us in the industry. In late 2009 it appeared that 2010 would be more of the same. ARRA funding, tax credits and grants and a generally more healthy economy drive US market demand. Looming over the supply demand equation is the effect of changing subsidy (FIT) rates in Germany. The overheated German demand has affected supply in the US in the first half of 2010—the great unknown is what the second half brings. Personally, I believe the second half will bring more predictable and stable growth in the US and a decrease of demand in Germany. Modest price increases are still possible but the industry's capacity overhang will limit margin expansion.

Amorphous silicon thin film panels will have to show 10+% efficiencies or will risk being marginalized. The largest turnkey equipment manufacturer in the world, Applied Materials seems to be de-emphasizing its solar business. Oerlikon appears to be doing better with its micromorph technology but the basic technology does not seem to be delivering on its promise of low-cost high efficiency panels. First Solar has demonstrated that the basic thin film model can deliver good efficiencies at low cost utilizing CdTe, but no one else is even close to First Solar's low-cost reliable value proposition.

The industry itself continues to suffer from a capacity overhang that will drive prices down for the next several years. Chinese module manufacturers are expanding aggressively in China and in the US and offer good quality at competitive pricing. Look for them to drive some consolidation in the industry as early as the end of 2010.

In closing, I would say that in my own career I have never seen anything as hard to predict as solar demand. My observation is that forecasts made in extreme high and low points of a business cycle are never as good or as bad as they seem to be. Observing the megatrends and fundamental business drivers yields better results over the long term than trend analysis!

For further information, contact Ed Wegener, SOLON Corporation, Tucson, AZ at 520/647-8723 or at Edward.Wegener@solon.com

