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|  | *Society for the Advancement of Material and Process Engineering*    **SAMPE Los Angeles Chapter**  News and Information | | **January**  **2017** |
| ***L.A. Chapter Meeting***  ***January 26, 2017 (Thursday) at 6:00 PM***  ***Composites for Narrow-Body Aircraft***  **Element Materials and Technology**  C:\Users\LP\AppData\Local\Microsoft\Windows\INetCacheContent.Word\Element.png | | | |
| **ADDRESS:**  Element Materials and Technology  1857 Business Center Drive  Duarte, CA  **PARKING:**  Parking at Element Materials and Technology | | **TIME:**  **6:00 PM** - Networking and Refreshments (Free)  **6:30 PM** - Presentation by Jens Hinrichsen  Tour of Element to follow presentation  **RESERVATIONS**:  Please [RSVP](mailto:eric.ehlers@canyoncomposites.com?subject=RSVP%20for%20SAMPE%20) by email to  eric.ehlers@canyoncomposites.com  Include name of all attendees in the RSVP.  Anyone may attend. | |

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| **Featured Speaker and Topic**  Jens Hinrichsen  Mr. Jens Hinrichsen - Project Manager  Commercial Aircraft Corp. of China  After earning his master degree from Technical University Hannover, Germany, in 1978, Jens Hinrichsen begun working for the Vereinigte Flugtechnische Werke - Fokker (VFW-Fokker, which is today a part of Airbus Group), in the flight physics department in the field of Structural Dynamics and Aeroelasticity.  In 1988 Jens joined the German-Chinese joint venture "MPCA" in Hamburg, Germany, founded by MBB (Messerschmitt-Boelkow-Blohm) and CATIC (China National Aero Technology Import & Export Corp.), as the assistant to the Vice President Industrial & Engineering.  Starting in 1992, Jens Hinrichsen was in charge of the technology preparation for Airbus A380, initially as Director Technology Controlling at DASA (Deutsche Aerospace) and finally as Chairman of the TMG (Technology Management Group), for the first common technology program across all Airbus partners, namely Aerospatiale (France), British Aerospace (Great Britain), CASA (Spain) and DASA (Germany). | Mid 1996 Jens was appointed "A380 Director Structures" at Large Aircraft Division of Airbus in Toulouse. His accountabilities during the five years of the concept phase comprised structural design concepts, preliminary sizing, systems integration, technology evaluation incl. risk assessment & risk mitigation as well as management of the technology maturity process, build & assembly concepts, and support to marketing campaigns at airlines.  From fall 2001 through March 2004 Jens was Head of the "Component Management and Integration Team" for the A380 vertical tail plane, responsible for engineering, manufacture, supply chain management, procurement and quality.  In 2005 Jens Hinrichsen became Aerospace-Director Product Strategy and Development at Alcoa (Aluminum Company of America), focusing on hybrid material developments.  In July 2009 Jens founded his own consulting enterprise, Aerospace Advisory Group LLC. He dedicated his endeavor to advanced wing design for Lockheed Martin and the US Air Force, followed by consultancy for COMAC's research and design institutes in Shanghai and Beijing. Introducing Jens Hinrichsen  Jens joined COMAC America in August 2014 as Head of Engineering & Projects.  Mr. Hinrichsen’s presentation will be on the topic of “Composites for Narrow-Body Aircraft” |

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| **About Element Materials and Technology**  Element Los Angeles is a division of Element Materials Technology, a dedicated independent testing group focusing in Materials Testing and Product Qualification Testing across a range of industries. Located in Los Angeles, the bulk of Element Los Angeles’s clients include aerospace component manufacturers and aerospace materials suppliers.  Element Los Angeles specializes in materials characterization of Polymer Matrix Composites, Ceramic Matrix Composites, and Plastics/Polymers. Testing departments include: mechanical and durability testing, thermal analysis, interior flammability testing, electrical property testing, environmental climatic testing, and physical material analysis. Element Los Angeles performs all specimen preparation in-house.  Element Los Angeles is accredited by A2LA to ISO/IEC 17025 and Nadcap per AC7122 and AS7103.  Element Los Angeles was formerly known as Delsen Testing Laboratories, and has been a member of SAMPE and a chapter sponsor for over 40 years.  Note that the meeting location is at Element’s facility in **Duarte**, see map below. |

**SAMPE LA Chapter to Sponsor Student to SAMPE 2017 Conference in Honor of Scott Beckwith**

*By George Epstein, Membership Director and Vice-Chair, LA SAMPE Chapter*

The Los Angeles Chapter of SAMPE is the original and first chapter of the Society for the Advancement of Material and Process Engineering (SAMPE -- originally named the Society of Aerospace Materials and Process Engineers). It was formed by a small group of aerospace materials engineers employed at various aerospace companies in the Los Angeles area to share experiences and learn from each other as they sought to resolve the many technical problems encountered during the early years. That goes back over 60 years – long before SAMPE became an international organization with members throughout the world.

Recently, the L.A. Chapter found itself in a sorry state. Judging by the diminishing attendance at its monthly meetings, interest in the Chapter was waning. The heavy auto traffic in the L.A. area didn’t help. Officers were discouraged and there were thoughts of discontinuing the chapter – as has happened (unfortunately) to other past chapters. The Board of Directors contacted Dr. Scott Beckwith, SAMPE Global Technical Director, who provided various suggestions and solutions based on his experience, primarily with the Utah Chapter, a very successful SAMPE Chapter.

The L.A. Chapter set to work following his advice. Before long, there was progress and new excitement, as the Chapter focused efforts on the local student chapters, teaming with them on several projects and monthly meetings, while continuing its very active and successful periodic hosting of International SAMPE technical conferences under the leadership of Dr. Leslie Cohen of SGL/Hitco Carbon Composites, and the scholarship awards program, now in its 20th year, under the direction of Dr. Howard Katzman of The Aerospace Corp. New leaders took the helm, including Eric Ehlers of Canyon Composites and Dr. Clem Hiel of Composite Support & Solutions, providing the stimulus to move forward in implementing many of Dr. Beckwith’s suggestions. The chapter also participated in the recent SAMPE Membership Drive organized by Michelle Tubb of the SAMPE Professional staff, earning second prize, including a generous cash award. Members of the Board who actively participated included Ted Zabielski, Tom Lemire, Hamid Saghizdeh, Larry Pranger and George Epstein. Of special note, as Clem Hiel points out, a key change was to locate chapter events at local universities, colleges and vocational institutes, “bringing SAMPE where the energy is and thus where its future lies.” (Dr. Hiel suggests that other chapters may elect to do likewise.)

In recognition of the outstanding support from Dr. Beckwith, the L.A. Chapter Board of Directors unanimously voted to use the Membership Drive cash award plus other chapter funds to provide all expenses for one student to attend the SAMPE 2017 Conference & Exhibits, May 22-25 in Seattle, Washington.   
New L.A. Chapter board member Alma Saiya of Exova OCM (company specializes in testing of materials) coordinated with the local colleges in selecting Joanne Garong, a remarkable young woman, to be the award recipient.

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| **Joanne Garong - Recipient of the L.A. Chapter Scott Beckwith Award**  Joanne Garong is a junior at Cal Poly Pomona, majoring in Mechanical Engineering with a minor in Mathematics. Her collegiate experience started at Ventura Community College, where she holds three Associates’ Degrees: Associate in Science in Mathematics & Associates in Arts Degrees in Liberal Studies and Natural Sciences/Mathematics. Joanne has always had a passion for the sciences and for learning. Previously, she was a Teacher’s Aide at Oxnard High School for three years, working with AP/College preparatory students, and as a Chemistry Laboratory Technician during her time at Ventura Community College. Joanne aspires to further continue her education, and will pursue a Master’s Degree in Electrical Engineering.  Joanne Garong  In her spare time, Joanne is an Access and Quality staff member for the Anime Expo in Los Angeles. With the enthusiastic endorsement and recommendation from her faculty mentor, Dr. Dixon Davis, we are pleased to announce Joanne Garong as the recipient of the SAMPE L.A. Chapter Scott Beckwith Award.  Image result for cal poly pomona |

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| **Honoring Dr. Scott Beckwith**  Scott Beckwith has an outstanding academic background and work experiences, well grooming him for his current role as SAMPE’s Technical Director:  C:\Users\LP\AppData\Local\Microsoft\Windows\INetCacheContent.Word\SWBeckwith Photo.jpg ● BS, Aerospace Engineering in 1964 from Texas A&M University, with interest in materials and structures.  ● MS, Aeronautics in 1965 from Caltech (his first exposure to polymers, viscoelasticity and fracture mechanics under world-eminent scientists, Drs. Max Williams and Wolfgang Knauss).  ● Employed at Edwards AFB Rocket Propulsion Lab (1965-1969), working on propellant materials and composite structural motor cases. This included his participation in solving the problem of cracked solid-propellant grains in the Minuteman Stage 1 motors.  ● Pioneered in working with very first carbon fiber/epoxy materials in 1967 (UK Courtaulds fibers).  ● Completed PhD at Texas A&M in 1974 -- developed viscoelastic fracture theory for fatigue loading and creep in fiber-reinforced composites for solid-rocket motor cases.  ● Continued this effort at Hercules Aerospace and Carbon Fibers Company (Salt Lake City, UT), working on several missile systems -- including Polaris, Poseidon, Trident 1, Trident 2, Peacekeeper, Pershing 2, Delta GEM, NASA Filament Wound (booster) Case Program.  ● Conducted carbon fiber technology and damage-prevention efforts in support of the various pressure vessels/rocket motor cases, McLaren Formula 1 cars, America's Cup, and the Voyager around-the-world aircraft (20 years).  ● Served as U.S. Dept. of Commerce Export Control industry expert on carbon fiber, resins and processing technology – appointed by three different U.S. presidents (1989-2003). ● BTG Composites, Inc. president, owner and consultant, serving as expert witness in product liability and patent infringement cases.  ● Lecturer at BYU, University of Utah and Texas A&M University.  ● Over 500 publications and technical presentations.  ● Currently, Technical Editor of the *SAMPE Journal* and the *Journal of Advanced Materials* (Editor). SAMPE Global Technical Director (1998-present). ● Recipient of SME Jud Hall Composites Manufacturing Award (1996), SACMA Materials Leadership Award (1999), SAMPE Fellow (2003), and SAMPE Distinguished Service Award (2016). |

Irene Epstein Scholarship

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| The Irene Epstein Memorial Scholarship Awards were initiated in 1996 shortly after the death of Irene Epstein, to honor her volunteer efforts on behalf of the Society for the Advancement of Material and Process Engineering (SAMPE), and to recognize her strong desire to assist financially-needy, academically-deserving students at Fairfax High School (Los Angeles) to attend college to study engineering, science, mathematics, or medicine.  The Irene Epstein Memorial Scholarship Awards program was initially funded by contributions from The Aerospace Corporation and SAMPE. It is also supported by the Air Force Space Systems Manufacturing Problem Prevention Program (MP3). | The program is administered by Dr. Howard A. Katzman, Senior Scientist at The Aerospace Corporation, and Education Chairman of the Los Angeles Chapter of SAMPE.  Many individuals and companies have generously contributed to help the fund grow so the amount of the scholarship awards has increased five-fold since it started. In addition, a special Book Awards was introduced three years ago to help selected students in the purchase of their college textbooks. If you would like to make a donation or learn more about the scholarship, please contact Dr. Howard A. Katzman at 310-336-5860 or e-mail him at [Howard.A.Katzman@aero.org](mailto:Howard.A.Katzman@aero.org)**.** |

**Schedule of Upcoming Events**

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| February 23, 2017 | SAMPE LA Chapter meeting at Cal Poly Pomona (tentative location)  Presentation by Doug Decker |
| March 23, 2017 | SAMPE LA Chapter meeting at Element in Huntington Beach  JPL presentation on Wheel Damage on Mars Rover |
| April 27, 2017 | SAMPE LA Chapter meeting at USC  Hosted by USC SAMPE student chapter |
| May 18, 2017 | SAMPE LA Chapter meeting at Proud Bird  Presentation by Alexander Velicki on Damage Arrest Capabilities of Preseus Stiffened Structures |

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Sponsors get monthly exposure in our mailing to over 750 members and associates of the local chapters of SAMPE. Sponsors also get a link to their corporate webpage via the SAMPE Los Angeles Chapter website.

For information on being a sponsor, please contact:

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