

## Mirror Tech Days Highlights June



**Mirror Tech Days** drew a healthy crowd this year.

The annual event, hosted by **nmOptics** and **SPIE** in June, to showcase optics technologies for applications from telescopes to solar energy had 107 attendees, including two from Italy and faculty members from the University of Arizona, CSU and Rutgers. There were 56 presentations spread over 3 full days. Some of the presentations are available at <http://www.nmoptics.org/library.html>.

During the **nmOptics** reception, **Cindy Kaiser**, chief engineer at **AFRL's Directed Energy Directorate**, gave a talk promoting AFRL-industry collaborations.

**David Wick** reports that "the **Southwest Student Conference** was a HUGE success," with 56 registrants from New Mexico, Arizona, Colorado and Texas. Talks and panel discussion at the event, held in conjunction with Mirror Days, drew both student and industry attendees.

The panelists were **nmOptics** Chairman **Jim McNally**; **CHTM** Director **Steve Brueck**; **Sandia's** deputy director, **Dan Rondeau**; chairman of **UNM's** Optics Program, **Luke Lester**; former head of optics research at **Raytheon**, **Roger Withrington**; and director of the 2.4m telescope at **Magdalena Ridge Observatory**, **Eileen Ryan**.

Students also toured **Schott Solar**, **Emcore** and **CVI Melles Griot**.

"The student leaders (both **SPIE** and **OSA**) deserve accolades, as this was very well run," **David Wick** says. "In addition, **Ed Spivak** and **Jim McNally** deserve a ton of credit for their support – both financial and logistically."

Next year's student conference will be in Tucson.

## nmOptics and PACA Sign MOU

**nmOptics** and the **Professional Aerospace Contractors Association (PACA)** have signed an MOU to support mutual cooperation and promote member networking, information exchange and increasing awareness of actions in government and education. Each organization will provide the other a paid membership for one person.



PACA, founded in 1984 to promote a healthy relationship between the aerospace industry and government agencies in New Mexico, has become a forum for government and industry interaction, with a membership of more than 100 aerospace, defense, and related professionals.

"This agreement extends the reach of each organization with regard to information dissemination, legislative influence and customer contact," says **PACA President Phil Vitale**, a DOD consultant in Albuquerque.

## NM MESA Honors Science Teachers

New Mexico MESA announced the 2009 **Dr. Arthur Guenther Endowment Advisor Achievement Award** finalists: Ron Meurer, West Mesa High School; Bitzi Seitzinger, Mesa Alta Junior High School; Denise Sanchez, Los Alamos Middle School; David Bryant, South Valley Academy; Vera Chestnut, Salam Academy; Stephanie Henderson, East Mountain High School; Moise Trujillo, Mesa Middle School; John Vigil, Mesa Middle School; Francie Bergener, Ruidoso Middle School; and Deborah Haggerton, Alta Vista Middle School.



The award honors science advisors each year. The winner, selected on the basis of participation in activities and performance in the MESA program, will be announced in August.

**Art Guenther** was a co-founder of **nmOptics**. NM Mesa is an **nmOptics** partner.

## Company News

The **Lunar Crater Observation and Sensing Satellite**, launched in June, incorporates **CSA Engineering's** EELV Secondary Payload Adapter Ring as the core structure. The device also served as structural support for the Lunar Reconnaissance Observer. Originally developed to allow launch of multiple small satellites with a large primary payload, ESPA can also function as a satellite or orbiting maneuvering vehicle structure.

**Jim McNally** has joined **Applied Technology Associates (ATA)**. Jim has more than 33 years of executive experience in government and private industry. He has a strong background in developing productive partnerships with private industry and government customers, the Company said, and will be responsible for leading the operations of ATA.

**Who's Who in Technology**, a panel of local experienced technology veterans have selected **Who's Who in Technology** – they are the key players in New Mexico technology. Sponsored by the New Mexico Business Weekly, the honorees will be recognized at the Awards Mixer on July 23, 2009. The honorees come from both the public and private sector and represent different industries. No surprise that a number of the 26 selected come from the ranks of nmOptics sponsors and companies.

Congratulations to nmOptics members: Sherman McCorkle, Ellen Veseth, Tom Stephenson, Deborah Peacock, Steven Brueck, Al Romig, and Jim McNally.

## Education Matters

The **Office of Naval Research** selected **Scott W. Teare**, **New Mexico Tech** department chairman and professor of electrical engineering, as a Senior Summer Faculty Fellow. Teare's research subjects are experimental adaptive optics, laser systems and optics. He will spend 10 weeks working with a team of Navy researchers to refine, develop and improve adaptive optics systems.





**Arup Maji**, chair of **UNM's** Department of Civil Engineering, will become interim dean of the **School of Engineering** in July, when Professor **Joe Cecchi** returns to the faculty.

For 10 years Arup was Senior Research Scientist at **AFRL**. There he was program manager of lightweight optical structures and was also program manager on the \$20 million Advanced Mirror System Demonstrator program. The ultra-lightweight mirrors developed in the program are being manufactured for use on the James Webb Telescope to replace the Hubble Space Telescope.

At **NMSU**, Dean **Steven Castillo** leaves July 1 to become provost and executive vice president of the Colorado School of Mines. **Ken White**, retired chair of Civil Engineering, will serve as interim dean.

**UNM** broke ground for the \$23 million **Science and Mathematics Learning Center** in June. The Chemistry, Mathematics, Biology, and Earth and Planetary Sciences departments will share the building, to be completed in fall 2010.

### New Mexico Optics News

The **Air Force** and **Boeing** in June successfully fired the high-power laser aboard the **Advanced Tactical Laser** aircraft for the first time in flight.

"This successful test is a major step toward bringing directed energy capability to the warfighter," said **Gary Fitzmire**, vice president and program director of **Boeing's** Directed Energy Systems.



During the test, the specially modified 46th Test Wing NC-130H aircraft equipped with the ATL weapon system took off from **Kirtland AFB** and fired its laser while flying over **White Sands Missile Range**, hitting a target board on the ground. ATL is equipped with a chemical laser, a beam control system, sensors and weapon-system consoles.

### Creative Shock and Awe

If the Bedouin village in the latest "Transformers" movie looks familiar, it's because the set was at **White Sands Missile Range**.



Most of the shooting in southern New Mexico took place at WSMR, which the visual effects supervisor described as one of his favorite locations. **Fort Bliss** provided tanks, Humvees, and personnel carriers, and about 150 military personnel from Bliss, White Sands, Holloman Air Force Base and NMSU's ROTC program were extras,

The **DOD**, which had a technical adviser on the set, allowed cameras to capture live firings of both its **Multiple Launch Rocket** and its **High Mobility Artillery Rocket** systems. Soldiers from Fort Bliss operated the tanks that helped blow up the set at the end of the shoot with live ammo.

## GRT, JTIP Changes Coming

Don't forget that new state gross receipts tax rates go into effect July 1. Be sure to check the [new rate table here](#) for your location to see if your rate changes. Questions? Call nmOptics member **Anita Williams Kelly** at 505-222-3564 or **Marcus Mims** at 505-222-3508.

Policy changes are in the works for the state **Job Training Incentive Program** (JTIP). Proposed changes include: Qualifications related to SB318 (green industries) and policy changes related to funding limitations, start-up companies and general administration of JTIP.

See the [NMEDD](#) Web site for more information.

## Coming Events

**Bill Fernandez** will discuss his "Ten Lessons Learned at Apple" during **Tech Thursday**, a **New Mexico Tech Council** event **July 9**.

The first employee at Apple, Bill will describe ten core principles that drove the development of Apple products during the dozen years he worked there and continue to be relevant to Apple and any company that wants to produce great products.

Bill is a consulting user interface architect and principal of **Bill Fernandez Design** in Albuquerque.

Tech Thursday is from 3:30 to 5 p.m. at O'Neill's Pub. Cost is \$15 for members, \$25 for nonmembers. Register at <http://www.nmtechcouncil.org/events/>

**Robert Carter**, executive director of **White Sands Missile Range**, is the speaker for **PACA's July 21** meeting, held at the Mountainview Club. Carter was appointed to the Senior Executive Service in June. PACA members are free; cost to nonmembers is \$15. To RSVP email [paca@ngc.com](mailto:paca@ngc.com).



**DEPS'** eighth annual **Directed Energy Test & Evaluation Conference** will be **August 10-12** in Albuquerque at the Hyatt Regency.

Conference highlights include technical presentations, short courses, poster papers, exhibits, speakers, and panels. Exhibit space is available.

Cost is \$495 for members until July 20 or \$555 for members and \$25 for students.

See <http://www.deps.org/DEPSpages/DETEconf09.html>



The 23<sup>rd</sup> annual **Briefing for Industry** is **August 17-19** in Albuquerque. The briefing provides a comprehensive summary of new business opportunities with federal agencies in New Mexico, along with a local and national perspective on government strategies and future directions. It's the preeminent event of its kind in the Southwest.

Co-sponsored by the **Professional Aerospace Contractors Association of New**

**Mexico** (PACA) and **AFRL**, BFI 2009 will bring together most of the federal government organizations in New Mexico, including AFRL, DOD, DOE, AFOTEC, WSMR, NASA, Sandia, and Los Alamos.

For information see [www.pacanm.org](http://www.pacanm.org)

**Questions/comments? Contact Jeanne Malone,  
nmOptics' Executive Director,  
[jeanne@nmoptics.org](mailto:jeanne@nmoptics.org) or 505 270 5607.**

**The LENS is taking a break in August. Send your  
announcements for the September newsletter to  
Lens Editor Sherry Robinson at  
[sherry@nmoptics.org](mailto:sherry@nmoptics.org).**