

Albuquerque Skyline by Ron Behrmann

## CONFERENCE TOPICS

- Fundamental Research and Basic Processes
- Microwave Generation and Plasma Interactions
- Charged Particle Beams and Sources
- High Energy Density Plasmas
- Pulsed Power Switches and Components

- Industrial, Commercial, and Medical Applications
- Pulsed Power Sources
- Pulsed Power Systems
- Diagnostics
- Prime Power and Power Conditioning

# Minicourse:

Diagnostics for High Density Plasmas and Pulsed Power Systems

# Special Workshop:

Writing for and Working with the Film Industry: An Introduction for Scientists and Engineers

www.ece.unm.edu/ppps2007



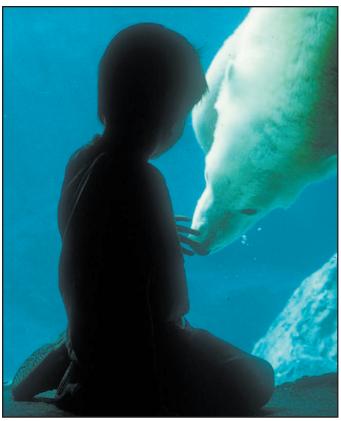
Sponsored by the Pulsed Power Science and Technology Committee and the Plasma Science and Applications Committee of the IEEE Nuclear and Plasma Sciences Society

# WELCOME AND BIENVENIDOS!

e wish to cordially invite you to attend PPPS-2007, the 16th IEEE International Pulsed Power Conference combined with the 34th IEEE International Conference on Plasma Science, sponsored by the Pulsed Power Science and Technology Committee and the Plasma Science and Applications Committee of the IEEE Nuclear and Plasma Sciences Society. PPPS-2007 will be held in Albuquerque, New Mexico from June 17-22, 2007. The conference venue is the Albuquerque Convention Center.

This is the second time that these two conferences are combining their activities, following the initial joint event in Las Vegas in 2001. Extending the concept, the IEEE Nuclear and Plasma Sciences Society's Symposium on Fusion Engineering (SOFE Conference) will also be co-locating with PPPS-2007, using the west wing of the Albuquerque Convention Center. Registrants for either PPPS-2007 or SOFE 2007 will be entitled to attend sessions in both conferences.

The technical portion of the PPPS-2007 conference will begin on Monday morning June 18, 2007 with a Super-Plenary session. Registrants of both PPPS-2007 and SOFE 2007 will be seated together in the Kiva Auditorium to hear three



Raymond Watt

PPPS-2007 conference attendees are invited to check out the very cool polar bears at the Albuquerque Zoo on Tuesday, June 19 from during our "night out."

plenary talks, one representing the Pulsed Power Community, one representing the Plasma Science Community, and one representing the Fusion Engineering Community.

PPPS-2007 will feature an outstanding technical program with reports from around the globe about new and innovative developments in the fields of pulsed power and plasma science and engineering. Since this conference is located in Albuquerque, New Mexico, arguably the Mecca of Pulsed Power and Plasma Science Research in the United States, we are expecting a large international participation.

If you enjoy browsing industrial exhibits, you will be pleased to learn that the poster sessions will be held in the large exhibit hall and we expect dozens of industrial exhibitors to present their latest technologies and products.

The minicourse for PPPS-2007 also reflects the scientific environment in New Mexico: Diagnostics for High Density Plasmas and Pulsed Power Systems. We are also running a Special Workshop that also reflects an emerging focus in New Mexico: Writing for and Working with the Film Industry: An Introduction for Scientists and Engineers. Many of you might not be aware that Governor Bill Richardson is a strong promoter of the Film Industry in New Mexico.

For true die-hards, spend an additional week and participate in the IEEE Particle Accelerator Conference (PAC 07), which will also take place at the Albuquerque Convention Center the week following PPPS-2007. During the weekend between PPPS-2007 and PAC 07 we are planning a Weekend of Science, with outreach to New Mexico students in coordination with the Governor's office.

Albuquerque, New Mexico is well known for its Sandia Mountains. Each registrant to PPPS-2007 will receive the University of New Mexico Press publication *Field Guide To The Sandia Mountains*. We hope that you will take some extra time before or after PPPS-2007 to enjoy the abundant nature in Albuquerque's back yard.

Whether your choice is red or green, you will find abundant award-winning local cuisine as well as world class restaurants in both Albuquerque and Santa Fe. We look forward to welcoming you in Albuquerque June 17-22, 2007.

For more information contact ppps2007@ece.unm.edu and keep visiting our website at www.ece.unm.edu/ppps2007.

Edl Schamiloglu Chair, PPPS-2007

Frank Peterkin Technical Program Chair, PPPS-2007

Gerald Cooperstein Chair, PPST Committee IEEE Nuclear & Plasma Sciences Society

Ron Gilgenbach Chair-Elect, PSAC/ExCom IEEE Nuclear & Plasma Sciences Society

#### CONFERENCE LOCATION

he conference will take place in the Albuquerque Convention Center, a spacious facility that will also make use of the large NE Exhibit Hall. The City of Albuquerque (http://www.cabq.gov/), right on Route 66, was recently ranked by Forbes Magazine as the Best Place for Business and Careers. Albuquerque just celebrated its Tricentennial (http://www.albuquerque300.org/) and Santa Fe is only an hour north. For the 15th straight year the sophisticated travelers

who subscribe to *Conde Nast Traveler* magazine have voted Santa Fe one of their favorite travel destinations in the United States. Santa Fe was selected as the Second most popular travel city in the country after San Francisco and ahead of a host of desirable travel towns in the magazine's 19th Annual Readers' Choice Awards.

Blocks of rooms have been set aside at several hotels and this information will be posted shortly on the conference website under "Accommodations."



www.marblestreetstudio.com

#### ABOUT ALBUQUERQUE

Albuquerque has so much to offer visitors that one truly needs to explore to experience all the unique attractions of our beautiful city. Families can enjoy excursions to the Biological Park, Rio Grande Zoo or the Albuquerque Aquarium. Outdoor enthusiasts can experience our amazing landscape by taking in a round of golf or by hiking along the many trails of the Sandia Mountains. Sports fans can root the UNM Lobos on to victory or enjoy a game of baseball with the Albuquerque Isotopes. Come find out why this is the Land of Enchantment!

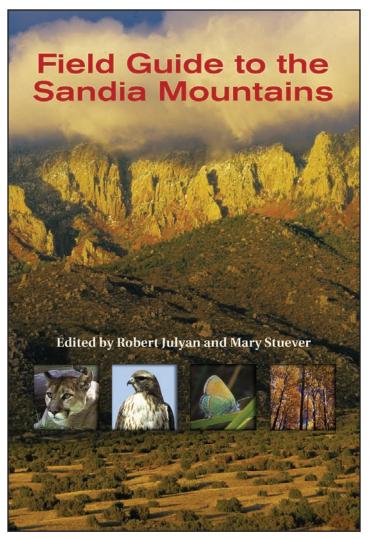
Albuquerque's local and regional attractions make it a perfect destination. Whether you are looking for science, history, art, or just some good fun, no city in the Southwest can offer the choices Albuquerque can.

Indulge in the unforgettable flavors of New Mexican cuisine. Traditional and unique restaurants can be found throughout the city to cater to any taste bud or budget. Top your day off and meet with friends for a night of dancing and celebration in one of the hip clubs and exotic bars the line Central Avenue, site of historic Route 66.

Albuquerque is renowned for its pleasant year-round climate. Low humidity and warm temperatures combine to make Albuquerque an enjoyable destination during any season.

The beautiful city of Albuquerque awaits your visit with hotel accommodation in convenient clusters near attractions and points of interest.

#### TAKE A HIKE



The Sandia Mountains are only about 10 minutes away from downtown Albuquerque. Your 260 page full color copy of the *Field Guide to the Sandia Mountains* (free to all conference attendees) will help you discover the diverse natural features of the Sandias!

## CONFERENCE FORMAT

The conference will include plenary, oral, and poster sessions. One plenary presentation will be an address by the 2007 IEEE NPSS Erwin Marx Award recipient; another will be an address by the 2007 IEEE NPSS Peter Haas Pulsed Power Award recipient; and another will be an address by the 2007 IEEE NPSS Plasma Science and Applications Award recipient.

Oral presentations will include both invited and contributed papers. Invited talks will be 30 minutes and contributed talks 15 minutes including five minutes for questions. Oral presentations will be delivered using a computer and LCD projector. The expected applications are Microsoft Powerpoint and Adobe Acrobat (pdf files).

Presentations are to submitted on a CD or flash memory and will be transferred to the database at registration. Posters should fit on 4-by-8-foot boards.

# STUDENT TRAVEL GRANT

A generous number of travel grants, up to \$750, are available to encourage *graduate students* who are IEEE members to attend PPPS-2007. Applicants should submit the following information by 28 February 2007.

- Copy of submitted abstract
- IEEE membership number
- Social security number (for US participants only)
- Proposed travel budget to the conference (cost sharing with other students is encouraged)
- Two letters of recommendation, one of which is from the student's advisor, stating the importance of the research to be presented

Application information should be sent to:

John Luginsland Numerex

401 East State Street #304 • Ithaca, New York 14850 607-277-4272 • John.Luginsland@numerex.com

## BEST STUDENT PAPER AWARDS

The "Best Student Presentation Awards" were established in 2005 by the IEEE Nuclear and Plasma Sciences Society to encourage student contributions and participation as principal or sole authors of papers and to acknowledge the importance of student contributions.

Students will self-identify their abstracts as being eligible for consideration in the "Best Student Presentation" competition when they submit their abstracts to the general PPPS-2007 pool.

In order to be eligible for an award, the student must fulfill the following three eligibility criteria: 1) The student must be the first author of the paper or poster and must have performed the majority of the work. 2) The work must be original. And 3) The student

must receive endorsement from her/his graduate advisor.

The evaluation committee will review the eligible abstracts and downselect up to 8 abstracts for presentation before the committee at the conference. Complete instructions will be provided to the finalists once their abstracts have been selected.

Selection criteria of presentations will be based

on the quality of the work as well as the student's grasp of the subject matter and his/her ability to communicate clearly.

Four student awards will be made, each consisting of a certificate and a check for \$500.

For information contact:

Dave Abe Naval Research Laboratory david.abe@nrl.navy.mil

# Diagnostics for High Density Plasmas and Pulsed Power Systems

two-day minicourse will be offered on Friday and Saturday, June 22 and 23 at the end of the PPPS-2007 Conference (34th Annual IEEE ICOPS combined with 16th IEEE International Pulsed Power Conference). This minicourse will be tutorial in nature, and will cover diagnostics suitable for high temperature, high density plasmas and pulsed power systems.

Examples include pulsed power-driven plasmas, such as Z-pinches, X-pinches, dense plasma focus, magnetized target fusion, capillary discharges, radiography diodes, and coherent radiation sources; as well as other high density plasmas such as laser-produced plasmas, and direct and indirect laser-driven ICF systems.

Individual topics will be covered in 45 - 90 minute presentations given by experts in the field from institutions such as Los Alamos National Laboratory, Lawrence Livermore National Laboratory, Sandia National Laboratories, as well as from several Universities.

Additionally, time will be devoted to overviews of planned or existing diagnostic systems on some of the larger high density plasma and pulsed power devices, such as the ZR machine at Sandia National Laboratories, and the National Ignition Facility (NIF) at Lawrence Livermore National Laboratory, in order to help give attendees a broader view of the implementation of such diagnostics.

### **MINICOURSE TOPICS**

Basics – Overview of High Density Plasma Diagnostics

**Pulsed Power Diagnostics** 

Spectroscopic Techniques: Visible - X-ray

Laser Scattering Diagnostic Techniques in High Density Plasmas

**Shadowography and Shlieren Techniques** 

**Imaging of High Density Plasmas** 

**Nuclear Diagnostic Techniques** 

Diagnostics for Magneto-Inertial Confinement Plasmas

Overview of diagnostics on large high density plasma experiments: NIF and Z

#### WHO SHOULD ATTEND

This minicourse is designed for engineers, scientists, technicians, and graduate students with an interest in high temperature, high density plasma diagnostics and/or pulsed power diagnostics.

The course will be targeted to the nonspecialist, but will assume a basic knowledge of plasma science.

#### MORE INFORMATION

Further information on minicourse registration, fees, student tuition grants, and instructors will be posted on the conference website shortly.



Albuquerque BioPark

Be sure to say "Hello!" to Hippo Karen and her newborn baby "Boopie" at the Albuquerque Zoo on Tuesday, June 19 during the "night out."

# LIST OF TOPICS AND SESSION ORGANIZERS

Technical Area/Session Topic		Proposed TAC/ Session Chair	Organization	Phone	Email
Funda Proce	amental Research and Basic	Paul Ottinger	Naval Research Laboratory	202-404-7567	ottinger@suzie.nrl.navy.mil
1.1	Basic Plasma Phenomena	Robert Merlino	University of Iowa	319-335-1756	robert-merlino@uiowa.edu
1.2	Computational Physics and Techniques	Thomas Hughes	Voss Scientific	505-255-4201	thomas.hughes@vosssci.com
1.3	Space Plasmas	Paul Bernhardt	Naval Research Laboratory	202-767-0196	paul.bernhardt@nrl.navy.mil
1.4	Space Environment and Breakdown	Umran S. Inan	Stanford University	650-723-4994	inan@ee.stanford.edu
1.5	Dusty Plasmas	Marlene Rosenberg	University of California, San Diego	858-534-4509	rosenber@ecepops.ucsd.edu
Microwave Generation and Plasma Interactions		John Scharer	University of Wisconsin-Madison	608-263-1614	scharer@engr.wisc.edu
2.1	High Power Microwaves	John Luginsland	NumerEx	607-277-4272	john.luginsland@numerex.com
2.2	Fast Wave Devices	Jagadishwar R. Sirigiri	Massachusets Institute of Technology	617-253-8619	jags@mit.edu
2.3	Slow Wave Devices	Henry Freund	SAIC	703-676-6134	henry.p.freund@saic.com
2.4	Microwave/RF Plasma Interactions	John Verboncoeur	University of California, Berkeley	510-642-3477	johnv@nuc.Berkeley.EDU
2.5	Vacuum Microelectronics	Ryan Umstattd	Air Force Office of Scientific Research	703-588-1930	ryan.umstattd@afosr.af.mil
2.6	Microwave Systems	Mike Haworth	Air Force Research Laboratory	505-853-3910	michael.haworth@kirtland.af.mil
Charg	ged Particle Beams and Sources	Bryan Oliver	Sandia National Laboratories	505-284-7868	bvolive@sandia.gov
3.1	Plasma, Ion, and Electron Sources	Sophie Chantrenne	KTech Corp.	925-462-1739	schantrenne@ktech.com
3.2	Intense Electron and Ion Beams	Christophe Vermare	CEA/PEM	33-326-03-0614	christophe.vermare@free.fr
3.3	High Current Accelerators	Patrick Corcoran	L-3 Communications/Pulse Sciences	510-577-7215	patrick.corcoran@L-3com.com
High I	Energy Density Plasmas	Chris Deeney	National Nuclear Security	202-586-7416	chris.deeney@nnsa.doe.gov
		Chillo Boothoy	Administration	202 000 1 110	cilis.deeney@ilisa.doe.gov
4.1	Fast Z-Pinches & Radiation Sources	Brent Jones		505-284-9481	bmjones@sandia.gov
4.1 4.2	Fast Z-Pinches & Radiation Sources See 4.5	·	Administration		
		·	Administration		
4.2	See 4.5 Magnetic Fusion Energy & Alternate	Brent Jones	Administration Sandia National Laboratories University of California, San	505-284-9481	bmjones@sandia.gov
4.2 4.3	See 4.5  Magnetic Fusion Energy & Alternate Concepts Inertial Confinement Fusion/High	Brent Jones George Tynan	Administration Sandia National Laboratories University of California, San Diego	505-284-9481 858-534-9724	bmjones@sandia.gov gtynan@ucsd.edu
4.2 4.3 4.4 4.5	See 4.5  Magnetic Fusion Energy & Alternate Concepts Inertial Confinement Fusion/High Energy Density Hydrodynamics Laser-Plasmas and Particle	Brent Jones  George Tynan  Vladimir Sotnikov	Administration Sandia National Laboratories University of California, San Diego University of Nevada, Reno	505-284-9481 858-534-9724 775-784-6778	bmjones@sandia.gov gtynan@ucsd.edu sotnikov@physics.unr.edu
4.2 4.3 4.4 4.5	See 4.5  Magnetic Fusion Energy & Alternate Concepts Inertial Confinement Fusion/High Energy Density Hydrodynamics Laser-Plasmas and Particle Accleration	Brent Jones  George Tynan  Vladimir Sotnikov  Farhat Beg	Administration Sandia National Laboratories University of California, San Diego University of Nevada, Reno University of California, San Diego Naval Surface Warfare Center	505-284-9481 858-534-9724 775-784-6778 858-822-1266	bmjones@sandia.gov gtynan@ucsd.edu sotnikov@physics.unr.edu fbeg@ucsd.edu
4.2 4.3 4.4 4.5	See 4.5  Magnetic Fusion Energy & Alternate Concepts Inertial Confinement Fusion/High Energy Density Hydrodynamics Laser-Plasmas and Particle Accleration d Power Switches and Components	Brent Jones  George Tynan  Vladimir Sotnikov  Farhat Beg  Stuart Moran	Administration Sandia National Laboratories University of California, San Diego University of Nevada, Reno University of California, San Diego Naval Surface Warfare Center Dahlgren Division	505-284-9481 858-534-9724 775-784-6778 858-822-1266 540-653-8026	bmjones@sandia.gov  gtynan@ucsd.edu  sotnikov@physics.unr.edu  fbeg@ucsd.edu  stuart.moran@navy.mil
4.2 4.3 4.4 4.5 Pulse 5.1	See 4.5  Magnetic Fusion Energy & Alternate Concepts Inertial Confinement Fusion/High Energy Density Hydrodynamics Laser-Plasmas and Particle Accleration d Power Switches and Components  Closing Switches	Brent Jones  George Tynan  Vladimir Sotnikov  Farhat Beg  Stuart Moran  Randy Curry	Administration Sandia National Laboratories University of California, San Diego University of Nevada, Reno University of California, San Diego Naval Surface Warfare Center Dahlgren Division Univ. of Missouri-Columbia	505-284-9481 858-534-9724 775-784-6778 858-822-1266 540-653-8026 573-882-3017	bmjones@sandia.gov gtynan@ucsd.edu sotnikov@physics.unr.edu fbeg@ucsd.edu stuart.moran@navy.mil curryrd@missouri.edu
4.2 4.3 4.4 4.5 Pulse 5.1 5.2	See 4.5  Magnetic Fusion Energy & Alternate Concepts Inertial Confinement Fusion/High Energy Density Hydrodynamics Laser-Plasmas and Particle Accleration d Power Switches and Components  Closing Switches Opening Switches	Brent Jones  George Tynan  Vladimir Sotnikov  Farhat Beg  Stuart Moran  Randy Curry Joe Schumer	Administration Sandia National Laboratories University of California, San Diego University of Nevada, Reno University of California, San Diego Naval Surface Warfare Center Dahlgren Division Univ. of Missouri-Columbia Naval Research Laboratory Naval Surface Warfare Center	505-284-9481 858-534-9724 775-784-6778 858-822-1266 540-653-8026 573-882-3017 202-404-4359	bmjones@sandia.gov  gtynan@ucsd.edu  sotnikov@physics.unr.edu  fbeg@ucsd.edu  stuart.moran@navy.mil  curryrd@missouri.edu  schumer@nrl.navy.mil

# LIST OF TOPICS AND SESSION ORGANIZERS

Technical Area/Session Topic		Proposed TAC/ Session Chair	Organization	Phone	Email
Indust Applic	rial, Commercial, and Medical ations	Jeff Hopwood	Tufts University	617-627-4358	hopwood@ece.tufts.edu
6.1	Low Pressure Non-Equilibrium Plasma Processing	Steve Shannon	Applied Materials	408-584-0362	Steve_Shannon@amat.com
6.2	Atmospheric Pressure Non-Equilibrium Plasmas	Michael G. Kong	Loughborough University	44-1509-22-7075	m.g.kong@lboro.ac.uk
6.3	Thermal Plasma Chemistry & Processing	Joachim Heberlein	University of Minnesota	612-625-4538	jvrh@umn.edu
6.4	Plasmas for Lighting, Displays, & Microdischarges	Kurt Becker	Stevens Institute of Technology	201-216-5671	kbecker@stevens.edu
6.5	Medical, Biological, & Environmental Applications	Mounir Laroussi	Old Dominion University	757-683-6369	mlarouss@odu.edu
6.6	Thrusters	Nikolaos A. Gatsonis	Worcester Polytechnic Institute	508-831-5576	gatsonis@wpi.edu
Pulsed	d Power Sources	David L. Johnson	L-3 Communications/Pulse Sciences	505-284-4029	dljohns@sandia.gov
7.1	Explosive Power Generators	Mark Lehr	Air Force Research Laboratory	505-846-0702	mark.lehr@kirtland.af.mil
7.2	High Current/High Power Pulsers	Ken Struve	Sandia National Laboratories	505-845-7483	kwstruv@sandia.gov
7.3	Compact Pulsed Power	Tommy Cavazos	SAIC	505-846-3221	thomas.cavazos@kirtland.af.mil
Pulsed	d Power Systems	Roger White	L-3 Communications/Pulse Sciences	858-499-0284 X130	roger.x.white@L-3Com.com
8.1	Electromagnetic Launch	Mark Crawford	IAT/University of Texas	512-232-4479	mark_crawford@iat.utexas.edu
8.2	Generators & Networks	Tommy Warren	L-3 Communications/Pulse Sciences	510-577-7251	tom.warren@L-3Com.com
8.3	Repetitive Systems	Mike Kempkes	Diversified Technologies Inc.	781/275-9444 x211	kempkes@divtecs.com
8.4	Pulsed Power for Lasers	Richard Ness	Cymer	858-385-5541	RNess@cymer.com
Diagno	ostics	Bruce Weber	Naval Research Laboratory	202-767-8373	weber@suzie.nrl.navy.mil
9.1	Optical, FIR, and Microwave Diagnostics	John Moschella	HY-Tech Research Corp.	540-639-4019	moschella@hytechresearch.com
9.2	X-ray Diagnostics	Phil Coleman	Alameda Applied Sciences Corp.	510-483-4156 x237	coleman@aasc.net
9.3	Charged Particle and Neutron Diagnostics	Weihua Jiang	Nagaoka University	81-258-47-9892	jiang@nagaoka.ac.jp
9.4	Pulsed Power Diagnostics	Ray Allen	Naval Research Laboratory	202-404-5324	allen@nrl.navy.mil
Prime	Power and Power Conditioning	Michael Giesselmann	Texas Tech University	806-742-3468	Michael.Giesselmann@ttu.edu
10.1	Solid State Switches	Stephen Bayne	Army Research Laboratory	301-394-0039	sbayne@arl.army.mil
10.2	Power Supplies and Modulators	Russell Spyker	Air Force Research Laboratory	937-656-4780	russell.spyker@wpafb.af.mil
10.3	Rotating Machines	John Pappas	University of Texas CEM	512-232-1644	j.pappas@mail.utexas.edu
10.4	Prime Power and Power System Topologies	Dwight Alexander	Northrop Grumman	408-735-2799	dwight.alexander@ngc.com

# Writing for and Working with the Film Industry: An Introduction for Scientists and Engineers

The purpose of this workshop is to provide an introduction for scientists and engineers to motion picture projects, including writing and other aspects of the process. The short course will be taught by two Hollywood insiders who have experience in virtually all aspects of motion pictures — and are gifted teachers.

The motivation for conducting this workshop is to foster education in science and engineering, and to communicate the value of scientific endeavor to the public through film and television. This motivation is stimulated by the current projected shortfall in graduates in science and engineering, and the impact of this on national defense, and on other areas of national technology, engineering and science, which forms the basis for innovation in the United States.



Jay Blackwood

The world's longest single-span aerial tramway rising to 10,378 ft. with an 11,000 square mile panoramic view from the peak of Sandia Mountains.

The workshop follows the methodology of similar workshops that have been conducted during the past three years in collaboration with the American Film Institute (AFI). This program teaches scriptwriting skills, and other aspects of selling scripts to Hollywood, to scientists and engineers who have interests in this activity.

Successful professionals in the scientific community often have excellent writing skills. They frequently juggle projects, just as writers do — often working on several widely different projects simultaneously. They manage time well, and accomplish complex, creative goals. They are often interested in 'movies' and what it takes to make them; however, they characteristically are reticent about going into something as divergent from science as entertainment — the organizer has personal experience with this. The project will thus be a catalyst — that will stimulate participation in creative issues by scientists and engineers.

The format and topics for the workshops conducted through the AFI may be viewed on the AFI website at http://www.afi. com/education/catalyst/default.aspx.

There will be no registration fee to attend this workshop. However, the attendee must be registered for the PPPS-2007 conference. *Note: This announcement is tentative and subject to change.* 

#### Workshop Speakers:

#### Syd Field, Author and Screenwriter

Syd Field is the author of 8 books on the craft of Screenwriting, published in some 22 languages and used in more than 400 colleges and universities around the country. His book, "Screenplay" is considered to be "the Bible of the film industry." He is on faculty at USC in the Masters of Professional Writing Program.

#### Alex Singer, Director

Alex Singer has directed over 280 television shows and five features. His credits include Profiles in Courage, The Fugitive, The Bold Ones, Police Story, Lou Grant, Cagney and Lacy, Hill Street Blues, Star Trek: The Next Generation, Deep Space Nine and Voyager. Singer has received numerous awards, including an Emmy and a Humanitas Prize. Singer is also on the Board of Advisors for the Institute for Creative Technologies, a joint U.S. Army and USC effort to explore and meld the creative resources of the cinema arts and communication technologies towards improving training and planning for the military, and has recently produced and directed a film for DARPA.

#### Workshop Organizer:

Dr. Martin Gundersen Professor of Electrical Engineering and Physics University of Southern California

#### REGISTRATION FEES

	In Advance On or before 30 April 2007	On Site After 30 April 2007
IEEE Members	\$500	\$600
Non-members	\$650	\$750
Student, Retired/Unemployed	\$150	\$200

#### **NOTES**

The registration fee for non-members includes a free six-month membership in the IEEE. See below.

Affiliate members of the IEEE Nuclear and Plasma Science Society (NPSS) qualify for the lower Members rate. For membership information, contact IEEE Member Services at 800-678-IEEE.

#### REGISTRATION CANCELLATION POLICY

Registrants wishing to cancel their registrations may receive a refund if requested in writing to Charles Reuben at the University of New Mexico. If the request is received by 1st May 2007, it will be processed without charge. A cancellation fee of \$100 will accrue for refund requests received after that date. Refunds will not be honored after 15 May 2007.

#### FREE INTRODUCTORY IEEE MEMBERSHIP

In order to encourage participation in the activities of the IEEE and the Pulsed Power Science and Technology and Plasma

Science and Applications Committees of the IEEE Nuclear and Plasma Science Society, free half-year memberships will be given to all interested non-IEEE members (including students) registering for this conference. This free half-year membership includes a subscription to IEEE Spectrum and Transactions on Plasma Science. The regular cost of a full year's membership can be found at www.ieee.org. Membership includes:

- 1. Subscription to Transactions on Plasma Science, a journal devoted to all aspects of plasma science and technology.
- 2. Subscription to IEEE Spectrum, a magazine covering engineering topics of general technical, economic, political, and social interest.
- 3. Subscription to the NPSS Newsletter with news items about the Pulsed Power Conference, Conference on Plasma Science, and the Symposium on Fusion Engineering.
  - 4. Eligibility to participate in a broad range of IEEE activities.
- 5. Opportunities for IEEE educational services such as video-conferences and individual learning packages.

To receive our free membership, fill out an application at the Registration Desk or call 800-678-IEEE.

#### REGISTRATION

#### ADVANCE REGISTRATION

Advance registration is highly recommended. Register in full (including payment of the registration fee) by 30 April 2007 to qualify for the lower advance registration fee.

Advance registration can be carried out online at the conference website. The online registration facility will be activated by January 2007.

#### **ABSTRACTS**

Abstracts must be submitted online following the instructions at the conference website.

We will continue to accept abstract submissions until the technical program committee convenes. Please follow the abstract guidelines carefully as the submitted abstracts will be used in the Conference Record.

#### **REGISTRATION ON-SITE**

There will be a Registration Desk at the Conference for attendees who have not registered in advance. The Registration Desk will be open on Sunday 17 June from 4 pm-9 pm. On Monday 18 June it will open at 7.30 am, and Tuesday 19th June through Friday 22nd June, it will open at 8 am.



www.marblestreetstudio.com

## SOCIAL EVENTS AND COMPANION ACTIVITIES

There will be a welcome buffet reception on Sunday 17 June from 6 to 8:30.

There is no charge for conference registrants. There will be a \$10 charge for companions and retirees.

Tickets can be purchased during online registration and on site at the Registration Desk.

The Conference night out will be Tuesday evening 19 June at the Rio Grande Zoo. Additional information on this event will be posted on the conference website.

The Conference Banquet will be held Thursday evening 21 June. A limited number of tickets are available. A nominal payment of \$25 will be charged to all conference registrants and companions. Tickets can be purchased during online registration and on site at the Registration Desk on a first-come first served basis.

Companion activities and tours are being organized by Ms. Judy Gilman, and information will be posted on the conference website shortly.



Ron Behrmann

Over 900 balloons float over the skies of Albuquerque at the annual Albuquerque International Balloon Fiesta each October.

## JOB PLACEMENT CENTER

Continuing the tradition from recent Pulsed Power Conferences and ICOPS Conferences a job placement center will be setup at PPPS-2007. Individuals interested in employment opportunities in pulsed power, plasma science, and related areas should send their resumes (marked "PPPS-2007") to the address below.

Will White Z Operations Group Ktech (Sandia National Laboratories) P.O. Box 5800, MS 1192 Albuquerque, NM 87185

Phone: 505-844-0081 Email: wmwhite@sandia.gov

#### CALL FOR PULSED POWER CONFERENCE AWARDS

#### Submit your nomination before February 1, 2007!

The Pulsed Power Conference honors professional contributions to the field of Pulsed Power with three award categories:

The Erwin Marx Award recognizes outstanding contributions to pulsed power technology by an individual over an extended period of time.

The Peter Haas Award recognizes outstanding contributions to pulsed power technology resulting from an individual's continued effort to develop programs of research, education, and information exchange that are the basis for progress in pulsed power.

The Pulsed Power Student Award recognizes outstanding students in pulsed power engineering annually. We are seeking nominations for the 2006 Student Award and the 2007 Student Award.

Please visit the "Awards" portion of the conference website for complete award descriptions and nomination procedures.

Peter J. Turchi Chair, PP Conference Awards Committee Los Alamos National Laboratory Mail Stop D-410 Los Alamos, New Mexico 87545 Phone: (505) 664-0525

Fax: (505) 667-7684 turchi@lanl.gov



www.marblestreetstudio.com

Historic Route 66's colorful neon signs are featured prominently along Albuquerque's Central Ave.

#### ORGANIZING COMMITTEES

#### **Conference Organizing Committee**

Edl Schamiloglu, Chair University of New Mexico Albuquerque, NM 87131

John Gaudet, Treasurer University of New Mexico Albuquerque, NM 87131

Charles Reuben, Conference Manager and Webmaster University of New Mexico Albuquerque, NM 87131

Bo Yu, Conference Registration and Paper Submission Webmaster Brookhaven National Laboratory Upton, NY 11973

Mark Gilmore, Conference Minicourse University of New Mexico Albuquerque, NM 87131

Dan Jobe, Conference Minicourse and Job Placement Center Ktech Corporation Albuquerque, NM 87123

Will White, Job Placement Center Ktech Corporation Albuquerque NM 87123

Martin Gundersen, Screenwriting Workshop University of Southern California Los Angeles, CA 90089

Peter Turchi, PP Conference Awards Los Alamos National Laboratory Los Alamos, NM 87545

John Luginsland, Student Travel Grants Numerex Ithaca, NY 14850

Dave Abe, Best Student Paper Awards and PSAC Award Naval Research Laboratory Washington, DC 20375

Darryl Droemer, Exhibits National Security Technologies/Sandia National Laboratories Albuquerque, NM 87185

Judy Gilman, Companion Activities Albuquerque, NM 87111

#### **Local Organizing Committee**

Christina Acosta - International Visitors Sandia National Laboratories Albuquerque, NM 87185

Robin Broyles - IT Support Sandia National Laboratories Albuquerque, NM 87185

Marie Byrd - Administration Texas Tech University Lubbock, TX 79409

Lisa Mattox - Administration Sandia National Laboratories Albuquerque, NM 87185

Salvador Portillo - Outreach Sandia National Laboratories Albuquerque, NM 87185

Beverly Rudys - Administration Sandia National Laboratories Albuquerque, NM 87185

#### **Technical Program Committee**

Frank Peterkin, Chair Naval Surface Warfare Center - Dahlgren Division Dahlgren, VA 22448

Mounir Laroussi, ICOPS Liason Old Dominion University Norfolk, VA 23529

Brian Hankla, Pulsed Power Conference Liason Naval Surface Warfare Center - Dahlgren Division Dahlgren, VA 22448

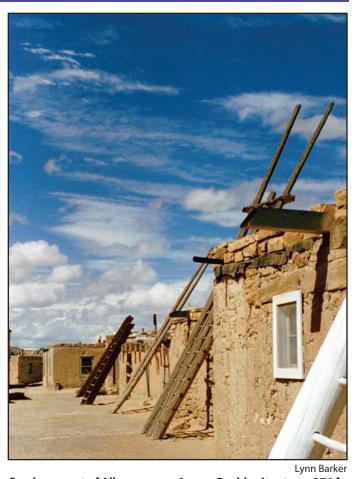
#### **Technical Area Chairs**

Paul Ottinger Naval Research Laboratory Washington, DC 20375

John Scharer Madison, WI 53706

Bryan Oliver Sandia National Laboratories Albuquerque, NM 87185

Chris Deeney National Nuclear Security Agency Washington, DC 20585



One hour west of Albuquerque, Acoma Pueblo sits atop a 376 ft mesa overlooking the desert. Acoma is the oldest continuously inhabited community in the United States.

Stuart Moran Naval Surface Warfare Center - Dahlgren Division Dahlgren, VA 22448

Jeff Hopwood Tufts University Medford, MA 02155

David Johnson L-3 Communications/Pulse Sciences - Sandia National Laboratories Albuquerque, NM 87185

Roger White L-3 Communications, Pulse Sciences San Diego, CA 92111

Bruce Weber Naval Research Laboratory Washington, DC 20375

Michael Giesselmann Texas Tech University Lubbock, TX 79409



www.marblestreetstudio.com

Albuquerque has spectacular year-round golfing available.