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The Princeton University Plasma Physics Laboratory is a United States Department of Energy Facility

Levine Receives DOE Award

he U.S. Department of Energy (DOE) recently honored PPPL employee Jerry Levine for achieving goals set by the National Environmental Policy Act (NEPA). Levine received the 1995 Energy Research NCO Quality Award for Preparation of Quality NEPA Documents. NCO stands for the NEPA Compliance Officer and the NCO Quality Awards recognize the achievements of the DOE's Office of Energy Research Headquarters, Field, and Laboratory personnel.

the award during the Energy Research Semiannual Envi-

ronment, Safety and Health (ES&H) Coordination Meeting at Gaithersburg, Maryland.

Milton Johnson, DOE Princeton Area Office Manager, said, "Jerry was recognized for his achievements for improving the NEPA process and in achieving the outcomes and goals envisioned in the National Environmental Policy Act."

Added PPPL Director Ronald Davidson, "Jerry's contributions to excellence in ES&H can only be described in superlative terms. He is highly deserving of receiving this important recognition."

Levine, who is Head of the Environmental/Nuclear Licensing/Permitting Division at PPPL, was cited "for



Levine recently received PPPL Deputy Director Dale Meade (left) and PPPL Director Ronald Davidson (right) congratulate Jerry Levine on receiving the 1995 Energy Research NCO Quality Award.

having successfully managed and coordinated the preparation of several technically complex NEPA documents for Energy Research projects at PPPL that have resulted in assisting the Department in achieving the environmental stewardship goals of the National Environmental Policy Act."

He was further recognized for leading the efforts to devise a comprehensive NEPA review procedure for the Laboratory that has promoted environmental awareness among Laboratory staff, as well as the importance of incorporating environmental values in the decision-making process for new proposed actions.

Levine received the award for his involvement in the preparation, review, and approval of three NEPA documents at the Laboratory. The documents were the Environmental Assessment (EA) for the Tokamak Fusion Test Reactor (TFTR) deuterium-tritium operations; the supplemental analysis to the first TFTR deuterium-tritium EA to address the Tritium Purification System for TFTR; and the EA for the TFTR shutdown and removal and the Tokamak Physics Experiment construction and operation. Levine also es-

tablished the NEPA system at the Lab, which ensures that the NEPA law is being followed.

On receiving the citation, Levine said, "I'm very appreciative of getting this award. The honor is shared by the whole Laboratory staff, who recognize the importance of performing activities in a safe and environmentally acceptable manner and act accordingly." •

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Lab Inventors Honored at Patent Dinner

hile inventions may be nurtured by necessity, they are protected by patents and invention disclosures.

During the thirteenth annual Patent Awareness Program Dinner, the Laboratory honored those inventors at PPPL who first exercised their "innovative and creative skills by advancing unique concepts to enrich the Laboratory's portfolio of intellectual property" and then filed to protect the fruits of their creativy.

The dinner, held May 18 at Princeton University's Prospect House, recognized forty-six inventors who participated in the Patent Program in fiscal year 1994.

Protecting Ideas

PPPL Director Ronald C. Davidson, the featured speaker, said the annual event recognizes inventors at the Lab, while impressing upon them the importance of protecting their ideas through patents and copyrights. He also pointed out the recent changes in the U.S. Patent law, noting they will have a "significant effect on the way inventions will be handled in the future."

"The U.S. has been issuing patents since 1790 on a 'first-to-invent' basis," said Davidson, commenting that such a system has worked well for the nation for 200 years. "The rest of the world, however, is on a 'firstto-file' system, whereby the only act that counts in determining who is the actual owner of a patent is who files first."

"With the 'first-to-file' system, anyone can in principle claim someone else's idea, file for the patent, and become the owner." —Ronald Davidson

The Lab Director conceded that switching systems is beneficial because it puts the U.S. on the same footing as the rest of the world. However, the changes will require researchers at the Laboratory to handle patentable material with more care than previously, he said.

"With the 'first-to-file' system, anyone can in principle claim someone else's idea, file for the patent, and become the owner," said Davidson. "Previously, inventors could make an invention public, having up to one year to file a formal application while retaining rights to the invention."

He said now a new provisional patent application is required by the Patent and Trademark Office to protect an idea for up to one year. "We will keep you informed about subsequent changes as they are introduced," he told the inventors.

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Following Davidson's remarks, the Director joined PPPL Deputy Director Dale Meade in presenting each PPPL inventor with a Certificate of Recognition.

In addition to thanking the inventors for their efforts, Davidson expressed gratitude to Peter Bonanos, Marilyn Hondorp, and the rest of the Patent Committee "for once again providing us with this opportunity to recognize inventors at the Laboratory." Other committee members are Steve Jardin, John Johnson, Dale Meade, Lewis Meixler, Charles Staloff, Schweickhard von Goeler, and Ken Young.

FISCAL YEAR 1994 PATENTS ISSUED

Method and Apparatus for Welding Precipitation Hardenable Materials

Holt Murray, I. Harris, J. Ratka, and W. Spiegelberg

Means for Positively Seating a Piezoceramic Element in a Piezoelectric Valve during Inlet Gas Injection

Kenneth Wright

Apparatus and Method for Uniform Microwave Plasma Processing using TE11 and TM01 James Stevens and Joseph Cecchi

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Inventors who attended the Patent Dinner in May are, from left, (front row) Jan Wioncek, Holt Murray, Mounir Awad, Martha Redi, Bill Persely, Ramon Pressburger, and Ronald Hatcher; (back row) John Desandro, Roland Snead, Rich Rossmassler, Nathaniel Fisch, Jean Rax, Shoichi Yoshikawa, Charles Skinner, Roscoe White, D. Kingston Owens, Geoff Gettelfinger, Szymon Suckewer, Alan Ramsey, and Sylvester Vinson.

PATENTS APPLIED FOR IN FISCAL YEAR 1994

Direct Current Sputtering of Boron from Boron/Carbon Mixtures John Timberlake, Dennis Manos, and Edward Nartowitz

Method of High Level Radioactive Waste Management Holt Murray

Lower Hybrid Current Drive in Tokamak Reactors using Alpha Particles Nathaniel Fisch and Jean Rax

FISCAL YEAR 1994 INVENTIONS DISCLOSED

Type "B" Disposable Molecular Sieve Bed

> Frank Tulipano, Richard Rossmassler, Lloyd Ciebiera, and Sylvester Vinson

Segmented Chuck for RF Biasing Large Substrates James Stevens and Joseph Cecchi Improved Low Energy Neutral Beam Source for Plasma Materials Processing

James Stevens

Automatic Video Monitoring System Thomas O'Connor

Arc Detection Using 2nd Harmonic Signal

Jim Rogers and Philip LaRue

Use of Magnetic Field Pitch Angle Measurements for Real-Time Tokamak Plasma Control Robert Kaita and Fred Levinton

Toxic Chemical System (TCS) Peter Del Gandio

Electro-Brazing D. Kingston Owens

Control of Stochastic Ripple Loss of Alpha Particles and Fast Ions in Fusion Plasmas

Martha Redi, Roscoe White, and Michael Zarnstorff

Using the Ion Bernstein Wave to Extract Power from Alpha-Particles

Nathaniel Fisch, Charles Karney, Richard Majeski, and Ernest Valeo Large Scale Chemical Synthesis System using Plasmas ShoichiYoshikawa

Method to Detect Arsenic Precipitates Buried Inside Silicon Surfaces Charles Skinner

Chemical Elements Mapping Soft X-ray Reflection Microscope Szymon Suckewer

Reconditioning Magnet Assembly of DC Switchgear

Mounir Awad, Raymon Pressburger, Fred Wasylenko, and William Persely

Active Induction of Transport Barrier in Plasma by Ion Bernstein Wave Power

> Ben LeBlanc, Masayuki Ono, and Steven Sesnic

A Compact m = ±Helicon Mode Plasma Source Utilizing a Planar Antenna Structure James Stevens and Joseph Cecchi

Method to Detect Calcium in Biological Tissues in a Natural State Charles Skinner

A Simple Experimental Kit for Middle School Students ShoichiYoshikawa

Sling Tension Unit Roland Snead, John Desandro, and Jan Wioncek

Method for Controlling Instabilities at the Edge of a Diverted Tokamak Allan Reiman

Compensation Loop Technique to Measure Radiation Effects on Fibers

Alan Ramsey

Optimized use of the Ion-Bernstein Wave in Channelling Alpha-Particle Power Ernest Valeo and Nathaniel Fisch



Chicken wings were a hit with one employee during the June 6 "Free Lunch" for employees held in the Lobby Courtyard.



Gathered around a picnic table are, from left, Roscoe White, Rich Hawryluk, Michael Bell, and Steve Sabbagh.



The lines moved quickly during the noontime picnic for staffers. Partaking in the food are, from left, P.J. Harris, Joann Fletcher, and Tom Steer.

Employees Fill Up On "Free Lunch"



rrom left, volunteer chefs Lew meixler and margaret Young pose with Angelo Candelori, John Bavlish, and Steve Iverson. Said Candelori, who organized the event, "I received quite a few comments on how well the free lunch was done. From all indications, it was a resounding success."



Filling their plates, from left, are Elaine Kozinsky, Bob I ucker, Jim Corl, and Michael Quigley.

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