The following story appeared in the July 29, 1999 issue of the PPPL HOTLINE.

Inventors Honored

by Patti Wieser

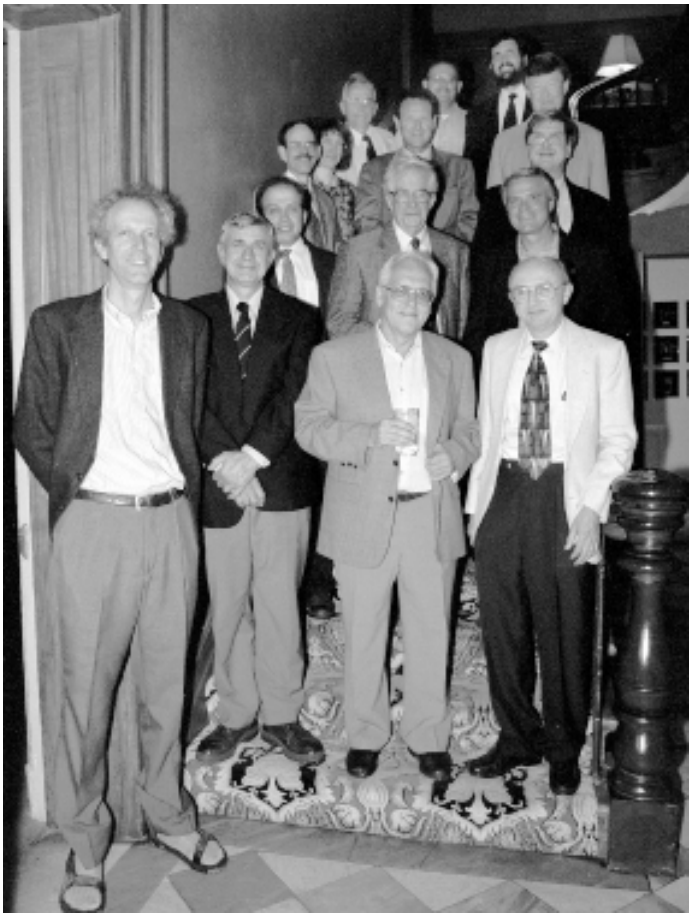
On June 29, the Laboratory celebrated the inventions of thirty-three individuals during the Fiscal Year 1998 Patent Recognition Dinner held at Princeton University's Prospect House.

"Inventors are an exiting bunch of people to work with. They are pushing the limits, and trying to create new ways of doing things, and in the course of their work are always questioning things that we all tend to take for granted," said Lewis Meixler, Chairman of the Lab's Committee on Inventions.

Meixler, who is also Head of Technology Transfer at PPPL, said there have been 676 invention disclosures filed by the Lab since it was established in 1951. Of those, 70 U.S. Patents have been awarded. "This averages out to 14 disclosures a year and about 1.7 patents annually," said Meixler. In 1998, there were 15 disclosures and two U.S. Patents awarded. Meixler also discussed a recent Supreme Court decision that will affect patent protection and a potential future test of the patent laws in the field of biology and genetics.

PPPL Director Rob Goldston, who presented the inventors with certificates, noted, "Fusion energy is critical to humankind in the long-term, and the spin-off technologies being honored tonight also demonstrate the value of plasma science and technology in the near-term."

The Committee on Inventions includes C.Z. Cheng, Sam Cohen, Dave Cylinder, Phil Efthimion, Terry Greenberg, Rich Hawryluk, Steve Jardin, Henry Kugel, Carol Phillips, Mike Williams, Ken Young, and Chairman Lewis Meixler.●



The inventors recognized at the Patent Dinner are, from left (front row), Charles Skinner, Henry Kugel, Manfred Bitter, and Kenneth Hill; (second row) Yevgeny Raitses, Wolfgang Stodiek, and A. Lane Roquemore; (third row) Amnon Fruchtman, Cynthia Phillips, Szymon Suckewer, and Robert Woolley; (fourth row) Schweickhard von Goeler, James Gorman, and David Mikkelsen.

Patents Issued in Fiscal Year 1998

Traveling Spark Ignition (TSI) System
Szymon Suckewer and Enoch Durbin

Method and Apparatus for Steady-State Magnetic Measurement of Poloidal Magnetic Field Near a Tokamak Plasma using only Fixed Air-core Electrical Coils and a Mechanical Strain Gauge
Robert Woolley

Patents Applied for in Fiscal Year 1998

Method and Apparatus for Measuring Micro Structures, Anisotropy and Birefringence in Polymers using Laser Scattered Light
Boris Grek, Joseph Bartolick, and Alan Kennedy

Method and Apparatus to Directly Produce Electrical Power Within the Lithium Blanket Region of a Magnetically Confined, Deuterium Tritium (D-T) Fueled Thermonuclear Fusion Reactor
Robert Woolley

continued

Inventions Disclosed in Fiscal Year 1998

Hall Thruster with Segmented Cathode Electron Injection
Nathaniel Fisch and Amnon Fruchtman

A Hollow Cathode Magnetron
Zhe Hui Wang and Samuel A. Cohen

Hybrid Aircraft: Capable of Flying as a Helicopter, Autogyro, or Fixed Wing Plane
David A. Cylinder

New Type of X-ray Imaging Crystal Spectrometers for Extended X-ray Sources
Manfred L. Bitter, Benjamin Fraenkel, James L. Gorman, Kenneth W. Hill, A. Lane Roquemore, Wolfgang Stodiek, and Schweickhard von Goeler

Synthesis of Ozone at Atmospheric Pressure by a Quenched Induction-Coupled Plasma Torch
Brentley C. Stratton, David R. Mikkelsen, Richard Knight, Elihu D. Grossman, Andreas Blutke, and John Vavruska

Remote Erosion Measurement in a Fusion Reactor
Charles H. Skinner

Generation of Periodic Accelerating Structures in Plasmas
Gennady Shvets, Alexander Pukhov, and Nathaniel J. Fisch

Parametric Amplification of Ultra-short Laser Pulses in Plasma
Gennady Shvets, Alexander Pukhov, and Nathaniel Fisch

Nonneutral Plasma Fusion Trap Device
Cynthia Kieris Phillips

Passive Positioning of Hall Thruster Fields
Amnon Fruchtman and Nathaniel Fisch

In-vessel Dust Measurements by a Quartz Microbalance
Charles Skinner and Henry Kugel

High Energy for Sterilization
John A. Schmidt

Micro Hall Thruster
Nathaniel Fisch and Yevgeny Raitses

Ultra-high-density Feedthroughs and Signal Conduits using Thick-film Printed Circuit Technology
Hironori Takahashi

Edge Turbulence Measurement by Laser Induced Fluorescence
Charles H. Skinner and Stewart J. Zweben

Laser-driven Source of Tunable Undulator Radiation
Nathaniel L. Fisch, Jean-Marcel Rax, and Gennady Shvets