

**NOBEL PRIZES associated with OAK RIDGE NATIONAL LABORATORY**

Clifford G. Shull (1994)  
Eugene P. Wigner (1963)

**PAST RECIPIENTS OF THE ENRICO FERMI AWARD  
OAK RIDGE NATIONAL LABORATORY**

11/14/2000

Sheldon Datz (2000)

Liane B. Russell (1994)

Richard B. Setlow (1988)

Alexander Hollaender (1983)

Alvin M. Weinberg (1980)

William L. Russell (1976)

Eugene P. Wigner (1958)

**OAK RIDGE NATIONAL LABORATORY RECIPIENT of the  
SARDI CARNOT AWARD for ENERGY CONSERVATION AND  
RENEWABLE ENERGY  
(U.S. DEPARTMENT OF ENERGY SCIENCE AND TECHNOLOGY  
AWARDS)**

Roger S. Carlsmith (1996)

## **PAST RECIPIENTS OF THE ERNEST ORLANDO LAWRENCE AWARD OAK RIDGE**

06/04/1999

### **ORNL**

Chain T. Liu (1988, Materials Research)  
Anthony P. Malinauskas (1985, Chemistry)  
Paul B. Selby (1981, Life Sciences)  
Fred R. Mynatt (1981, Nuclear Technology)  
Charles D. Scott (1980, Chemistry)  
Adolphus L. Lotts (1976, Materials Research)  
Chester R. Richmond (1974, Life Sciences)  
James R. Weir (1973, Materials Research)  
John B. Storer (1968, Life Sciences)  
Arthur C. Upton (1965, Life Sciences)  
Floyd L. Culler (1965, Nuclear Technology)  
Alvin M. Weinberg (1960, Physics)

### **ENRICHMENT**

J. Robert Merriman (1987, Nuclear Technology)  
Dean A. Waters (1977, Nuclear Technology)  
Paul R. Vanstrum (1966, Nuclear Technology)

### **Y-12**

Gerard M. Ludtka (1995, Materials Research)  
John M. Googin (1967, Nuclear Technology)

## **NATIONAL ACADEMIES OF ENGINEERING/SCIENCES PRESENTLY OR FORMERLY ASSOCIATED WITH OAK RIDGE**

02/28/2002

REFERENCES: <http://www4.nationalacademies.org/nas/nashome.nsf>

<http://www.nae.edu/>

**NAE:**

Jack J. Dongarra (2001)  
John H. Gibbons (1994)  
Alvin W. Trivelpiece (1993)  
Jim Callen, presently at University of Wisconsin (1990)  
Murray W. Rosenthal (1990)  
John M. Googin (1988) (deceased, January 1994)  
Frank L. Parker, presently at Vanderbilt University (1988)  
Charles D. Scott (1986)  
George R. Jasny (1983)  
Herbert G. MacPherson (1978) (deceased, January 1993)  
Robert A. Charpie (1975)  
Alvin M. Weinberg (1975)  
Floyd L. Culler (1974)  
William D. Manly (1974)

**NAS:**

Audrey Stevens Niyogi (1998) \*\*\*  
Gerald D. Mahan (1995) \*\*\*  
Liane B. Russell (1986) \*\*\*  
Nathan Edward Tolbert (1984)  
Mary-Lou Pardue (1983)  
Oscar L. Miller, Jr. (1978)  
Roderick K. Clayton (1977)  
James H. Taylor (1977)  
August H. Doermann (1975), Now Emeritus  
Clifford G. Shull (1975)  
Jacob Furth (1974), Deceased-1979  
Dan L. Lindsley (1974), Research Professor Emeritus, U. of California - San Diego,  
Center for Molecular Genetics  
David M. Prescott (1974), Living in Colorado  
Franklin W. Stahl (1974)  
William L. Russell (1973) \*\*\*  
Richard B. Setlow (1973) \*\*\*  
Charlotte Auerbach (1970), Foreign Associate, Deceased - 1993  
Norman H. Giles (1966)  
Ray D. Owen (1966)  
William A. Arnold (1962), Deceased - 2001 \*\*\*  
Seymour Benzer (1961)  
Alvin M. Weinberg (1961) \*\*\*  
David M. Bonner (1959), Deceased -1964

A. Hollaender (1957), Deceased - 1990? \*\*\*  
Eugene P. Wigner (1945), Deceased - 1995  
Samuel Colville Lind (1930), Deceased - 1965

\*\*\* NAS Members Elected while AT ORNL (Source: Fred Hartman via Frank Munger)

## **PRESIDENTIAL EARLY CAREER AWARDS for SCIENTISTS AND ENGINEERS ORNL'S HISTORICAL WINNERS**

02/21/2002

**Ian Maclean Anderson** (Metals and Ceramics Division) - 2001

For his leading-edge research in the development of electron beam microcharacterization techniques and their application to materials research and development

**Thomas Vincent Cianciolo** (Physics Division) - 2001

For innovative definition of a unique measurement program for an experiment on the Relativistic Heavy Ion Collider and leadership in organizing and designing a principal detector that has been implemented at the facility

**David J. Dean** (Physics Division) - 1997

For research in the field of nuclear structure physics

**Philip M. Jardine** (Environmental Sciences Division) - 1996

For his studies relating to mobility of chemicals in subsurface, heterogeneous soil and rock systems

**James W. Lee** (Chemical Technology Division) - 1998

For seminal contributions to photosynthesis research and its application to nanofabrication

**Anthony Mezzacappa** (Physics Division) - 1998

For his work identifying the explosive mechanism of core-collapse supernovae

**David E. Newman** (Fusion Energy Division) - 1997

For seminal contributions to the theoretical understanding of turbulence and transport in magnetic fusion devices

**Lynne E. Parker** (Computer Science and Mathematics Division) - 1999 (These awards were not granted until 2000, but Lynne told me that her award says "1999" on it.)  
For exceptional research and national leadership in the area of heterogeneous multi-robot cooperation

**Michael S. Smith** (Physics Division) - 1996  
For instituting a strong nuclear astrophysics research program, specifically utilizing radioactive beams

**Jizhong (Joe) Zhou** (Environmental Sciences Division) - 2001  
For pioneering research and leadership in functional genomics and microbial ecology through the application of genomic technologies to address complex environmental problems

#### FOOTNOTES

**(Other honors related to the modern PECASE program):**

**D. L. Mykles**, (Biology Division) - 1990

\*\*\* NOTE (03/31/1990 entry in Honors and Awards database): Mykles was a former U. of TN postdoc fellow at ORNL, in the Biology Division, and was Associate Professor of Biology at Colorado State University when he won the NSF Presidential Young Investigator Award. For research done at ORNL on "Muscle Atrophy in Crabs and Lobsters."

**Thomas G. Thundat** (Health Sciences Research Division) - 1996 (WON DOE-OER YOUNG INDEPENDENT SCIENTIST AWARD BUT NOT PECASE AWARD)  
For developing a novel class of universal micromechanical sensors for physical, chemical, and biological detectors

#### **R&D 100 WINNERS**

**ORNL, Y-12 National Security Complex (Formerly Y-12), AND ETPP (Formerly K-25)**

#### **HISTORICAL**

P. W. King  
12/03/2003

c:\rd100\R&D 100 Winners, Oak Ridge, Historical.doc

**(NOTE: After 1987, the name of the award was changed from "I-R 100 Award" to "R&D 100 Award.")**

2003

Engineering Science and Technology

Panos Datskos, Slobodan Rajic, Lawrence Senesac, James Corbeil, Nickolay V. Lavrik

**UMIR-CAM: Uncooled Micromechanical Infrared Camera**

2003

Metals and Ceramics; Caterpillar; Bradley University; Solar Turbines

JOINT W/: Caterpillar, Inc.

ORNL: Philip J. Maziasz and Robert W. Swindeman; Caterpillar Technical Center, but Frary is currently on leave and graduate student at M.I.T.: Michael J. Pollard and Megan E. Frary; Caterpillar Track-Type Tractors Business Unit: Chad Siebenaler; Bradley University: Timothy E. McGreevy; Solar Turbines - DeSoto Overhaul Facility: Paul F. Browning; Solar Turbines - Materials & Processes Engineering: Arun K. Bhattacharya

**CF8C-Plus: New Cast Stainless Steel for High-Temperature Performance**

2003

Chemical Sciences; Protasis Corp.

JOINT W/: Protasis Corp.

ORNL: J. Michael Ramsey, William B. Whitten, Peter T. A. Reilly and Oleg Kornienko (postdoctoral fellow); Protasis, Corporation: David Strand

**Protasis MicroTrapMS™: MicroTrap Mass Spectrometer**

2003

Life Sciences; Engineering Science and Technology; RIS, Inc.

ORNL: Tuan Vo-Dinh, Alan L. Wintenberg, Joel Mobley, Brian M. Cullum, David L. Stokes and Steven S. Frank; RIS, Inc.: Robert Maples

**RAMiTS: Raman Integrated Tunable Sensor**

2002

Life Sciences; Engineering Science and Technology

JOINT WITH: Innovadyne Technologies

ORNL: Mitchel J. Doktycz (Life Sciences) and J. Steven Hicks (Engineering Science and Technology); Innovadyne Technologies, Inc.: James E. Johnson, Neil R. Picha and Dave Martin

**ASAP™ (Any Source Any Position) Fluid Handler**

2002

Engineering Science and Technology;

JOINT WITH: Applied Materials, Inc.

ORNL: Kenneth W. Tobin, Thomas P. Karnowski and Regina K. Ferrell; Applied Materials, Inc.: Amos Dor, Barry Wong and Yifan Gavra

**DSI™ - AIR: Defect Source Identifier - Automated Image Retriever**

2002

Nuclear Science and Technology; Metals and Ceramics

JOINT WITH: Inventure Laboratories, Inc.

J. A. Wang (Nuclear Science and Technology) and K. C. Liu (Metals and Ceramics)

**ORNL Spiral-Notch Torsion Test (SNTT) System**

2001

Joint w/ ECR International and Arthur D. Little

Energy

R. Zogg (Arthur D. Little), R. Williams (Arthur D. Little), J. Hoyt (Enviromaster International Corporation), V. D. Baxter (Energy), R. W. Murphy (Energy), J. J. Tomlinson (Energy), and R. L. Linkous (Energy)

**Drop-In Residential Heat Pump Water Heater**

2001

Life Sciences

Ying Xu (Life Sciences) and Dong Xu (Life Sciences)

**PROSPECT (copyright) - PROtein Structure Prediction and Evaluation Computer Toolkit**

2000

Joint w/ Poco Graphite, Inc.

Metals and Ceramics, Office of Technology Transfer

James W. Klett (Metals and Ceramics), Timothy D. Burchell (Metals and Ceramics), Ashok Choudhury (Office of Technology Transfer), Ron Mertz (POCO Graphite, Inc.), Charles Turner (POCO Graphite, Inc.) and Lee W. Wiechmann (POCO Graphite, Inc.)

**ORNL High-Thermal-Conductivity Graphite Foam**

2000

Joint w/ Orbital Sciences Corporation, MSP Corporation, Colorado School of Mines, and U.S. Army Soldier and Biological Chemical Compound

Chemical and Analytical Sciences, Instrumentation and Controls, Computational Physics and Engineering, Life Sciences, and Computer Science and Mathematics (and LMES Advanced Technologies)

Wayne H. Griest (Chemical and Analytical Sciences), William H. Andrews (Instrumentation and Controls), Don W. Bible (Instrumentation and Controls), J. Eric Breeding, Michael N. Burnett (Chemical and Analytical Sciences), Kim N. Castleberry (Instrumentation and Controls), Dwight A. Clayton (Instrumentation and Controls), Richard I. Crutcher (Instrumentation and Controls), Kevin J. Hart (Chemical and Analytical Sciences), Mike S. Hileman (Instrumentation and Controls), Ralph H. Ilgner (Chemical and Analytical Sciences), W. Bruce Jatko (Instrumentation and Controls), Roger A. Jenkins (Chemical and Analytical Sciences), Stephen A. Lammert (Chemical and Analytical Sciences), David E. McMillan (Instrumentation and Controls), Randy L. McPherson (Chemical and Analytical Sciences), Roosevelt Merriweather (Chemical and Analytical Sciences), Richard W. Reid (Computational Physics and Engineering), Irene F. Robbins (Computational Physics and Engineering), David E. Smith (Instrumentation and Controls), Robert R. Smith (Chemical and Analytical Sciences), Carl W. Sohns

(Instrumentation and Controls), K. Ann Stewart (LMES Advanced Technologies), Cynthia L. Terry (Computational Physics and Engineering), Cyril V. Thompson (Chemical and Analytical Sciences), Arpad A. Vass (Life Sciences), Robert A. Whitaker (Computational Physics and Engineering), Marcus B. Wise (Chemical and Analytical Sciences), Dennis A. Wolf (Computer Science and Mathematics), R. Wes Wysor (Instrumentation and Controls), and Judy C. Zager (Computational Physics and Engineering)

**ORBITAL SCIENCES CORPORATION:**

Shephard T. Girion, Francis Dompier, William S. Donaldson, Hsienchi William Niu, Gus Norton, Mike Phillips, Gerry Stillman, and Harry Tamme

**MSP CORPORATION:**

Darryl L. Roberts, Benjamin Y. H. Liu, Virgil A. Marple, and Francisco J. Romay

**COLORADO SCHOOL OF MINES:**

Kent J. Voorhees, Franco Basile, Michael J. Beverly, Chris Abbas-Hawks, and Allen B. Henderson

**US ARMY SOLDIER AND BIOLOGICAL CHEMICAL COMMAND:**

Alexander Hryniewicz and David Sickenberger

**The Block II Chemical Biological Mass Spectrometer (Block II CBMS)**

2000

Joint w/ Beamline Technology Corporation

Metals and Ceramics

Gene E. Ice (Metals and Ceramics) and Andrew Lunt (Beamline Technology Corporation)

**Differentially Deposited X-Ray Microfocus Mirrors**

1999

ORNL

Administrative Services; Metals and Ceramics

Wilson, Kirk A.; Burchell, Timothy D.; and Judkins, Roddie R.

Self-Cleaning Carbon Air Filter

1999

ORNL

Life Sciences, Instrumentation and Controls, Post Doc, Graduate Student

Vo-Dinh, Tuan; Wintenberg, A. L.; Ericson, M. N.; Alarie, J. P.; Isola, Narayan (post doc); Askari, M.(Grad Student);

Miller, G. H.

The Multifunctional Biochip

1999

ORNL; Joint w/ American Iron and Steel Institute (Joseph Vehec), Bailey Engineers, Inc. (Richard A. Barcelona), and

National Steel Technical Center (Liwei Zhang)

Engineering Technology; Instrumentation and Controls

Allison, Stephen W.; Beshears, David L.; Cates, Michael R.; Childs, R. Mitchell;

Manges, W. W.; McIntyre, Timothy J.; and

Simpson, Marc  
The Galvaneal Temperature Measurement System (GTMS)

1999

ORNL

Metals and Ceramics; Solid State; Chemical and Analytical Sciences; Post Doc  
Goyal; Budai; Norton; Specht; Christen; Kroeger; Paranthaman; List; Feenstra; Lee;  
Beach; Martin; Hatfield; Mathis; Park  
(post doc); Cui (post doc); Verebelyi (post doc); Williams; Cantoni (post doc); Kerchner;  
Chirayil (post doc)  
RABiTS (trademark): Low Cost, Single-Crystal-Like, Flexible Substrates for  
Energy/Electronic Applications

1999

ORNL

Engineering Technology; EEG, Inc.; Development (LMES)  
Datskos, Panos G.; Rajic, Slobodan; Evans, B. M., Datskou, Irene; Egert, Charles M.  
(deceased)  
Micromechanical Quantum Detector

1999

ORNL

Energy

Mei, V. C.; Chen, F. C.; Murphy, R. W.; Domitrovic, R. E.  
Frostless Heat Pump

1999

UT; Joint w/ ORNL

Computer Science and Mathematics; University of California - San Diego  
Dongarra, Jack J. and Casanova, Henri  
NetSolve 1.2

1999

UT; Joint w/ ORNL

Computer Science and Mathematics; University of Tennessee  
Dongarra, Jack J. and Whaley, R. Clint  
ATLAS

1998

ORNL

COMPUTER SCIENCE AND MATHEMATICS

BARHEN, JACOB; OBLOW, E. M.; PROTOPOPESCU, VLADIMIR A.; AND REISTER,  
DAVID B.

TERMINAL REPELLER UNCONSTRAINED SUBENERGY TUNNELING (TRUST): A  
COMPUTATIONAL TOOL FOR GLOBAL  
OPTIMIZATION

1998

ORNL

ENGINEERING TECHNOLOGY; Y-12 DEVELOPMENT  
DATSKOS, PANOS G.; RAJIC, SLOBODAN; EGERT, CHARLES M.  
CALSPEC CHEMICAL SENSOR, CSCS-10

1997

ORNL, LMES, LLNL, LANL, SNL, IBM

CENTER FOR COMPUTATIONAL SCIENCE; INFORMATION TECHNOLOGY  
SERVICES

KLIEWER K-BURRIS R-MILLION D-STEINERT D-WHITE V; PLUS 34 EXTERNAL  
DEVELOPERS

HIGH PERFORMANCE STORAGE SYSTEM (HPSS)

1997

ORNL

CHEMICAL TECHNOLOGY; LIFE SCIENCES

COLLINS, EMORY D.; MIRZADEH, SAED; KNAPP, F.F.

MODULAR TECHNETIUM 99-M CONCENTRATOR

1997

ORNL/ANL/PNL/NREL/APPLIED CARBOCHEM

CHEMICAL TECHNOLOGY

DAVISON BH; NGHIEM NP; SUTTLE BE; ANL: DONNELLY M, MILLARD CS, TSAI  
S-P, AND WU M; PNL: FRYE J,

WANG J, AND WERPY T; NREEL: LANDUCCI R AND PETERSON G; APPLIED  
CARBOCHEMICALS, INC.: GRIFFIN M

PRODUCTION OF CHEMICALS FROM BIOLOGICALLY DERIVED SUCCINIC ACID  
(BDSA)

1997

ORNL; LMES; ATOMIC ENERGY OF CANADA

ENGINEERING TECHNOLOGY; Y-12 DEVELOPMENT

JANKE CJ; DORSEY GF (Y-12); HAVENS SJ (ORISE POST DOCTORAL

STUDENT); LOPATA VJ (ATOMIC ENERGY OF  
CANADA, LTD.)

ELECTRON-BEAM-CURABLE CATIONIC EPOXY RESINS

1997

ORNL/SUPELCO INC.

CHEMICAL AND ANALYTICAL SCIENCES

SIGMAN ME; DINDAL A; WACHOB G (SUPELCO, INC.)

METHYLATED SOL-GEL SORBENT (M-SGS)

1997

ORNL/THOMPSON ALUMINUM CASTING CO.

METALS AND CERAMICS

VISWANATHAN S; PURGERT RM (THOMPSON ALUMINUM CASTING CO.)  
METAL COMPRESSION FORMING

1997

ORNL/LAMBDA TECHNOLOGIES

INSTRUMENTATION AND CONTROLS; METALS AND CERAMICS

BIBLE D; LAUF R; LAMBDA TECHNOLOGIES: FATHI Z, HAMPTON M, AND  
STEVENS R

VARI-WAVE, MICROWAVE HEATING INSTRUMENT

1997

LMES/ORNL/BLASCH PRECISION CERAMICS

Y-12 DEVELOPMENT; METALS AND CERAMICS

MORROW MS (Y-12); KIGGANS JO, JR. (ORNL); HOLCOMBE, C.E. (RETIRED  
FROM Y-12; CONSULTANT TO ORNL M&C

DIV); REXFORD DG (BLASCH PRECISION CERAMICS)

METAL CERAMIC COMPOSITE CRUCIBLE

1997

LMES/ORNL

NATIONAL SECURITY PROGRAMS OFFICE; PROTECTIVE SERVICES; I&C;  
ENGINEERING

LABAJ; BATH; BAYLOR; CARROLL; DRESS; FULLER; HICKERSON; KERCEL;  
MCCOIG; PACK

ENCLOSED SPACE DETECTION SYSTEM

1996

ORNL

SOLID STATE

BATES JB - DUDNEY NC - LUCK CF

THIN-FILM RECHARGEABLE LITHIUM BATTERIES

1996

ORNL/EXTERNAL

HEALTH SCIENCES RESEARCH - GENASE, INC.

DEES C (GENASE, INC.)

GENCELL 101

1996

ORNL/EXTERNAL

SOLID STATE - COMMERCIAL CRYSTAL LABORATORIES, INC.

FEENSTRA R - BOATNER LA - URBANIK M (COMMERCIAL CRYSTAL  
LABORATORIES, INC.)

POTASSIUM TANTALATE (NIOBATE) SUBSTRATES FOR ELECTROOPTIC AND  
SUPERCONDUCTING FILM GROWTH

1996  
ORNL  
CHEMICAL AND ANALYTICAL SCIENCES  
RAMSEY JM - JACOBSON SC  
LABORATORY-ON-A-CHIP

1996  
ORNL/EXTERNAL  
HEALTH SCIENCES RESEARCH - CONSULTEC SCIENTIFIC, INC.  
THUNDAT T - WACHTER EA - WARMACK RJ - ODEN PI (POST DOCTORAL  
FELLOW) - DATSKOS PG (CONSULTEC  
SCIENTIFIC, INC.)  
MICROCANTILEVER MERCURY VAPOR SENSOR AND NONCONTACT  
MICROMECHANICAL THERMOMETER

1996  
ORNL  
HEALTH SCIENCES RESEARCH  
VO DINH T - HOUCK KS - STOKES DL  
SURFACE-ENHANCED RAMAN GENE (SERGen) PROBE

1995  
ORNL  
METALS AND CERAMICS  
SIKKA VK - VOUGHT JD - DEEVI SC  
EXO-MELT PROCESS

1995  
ORNL  
METALS AND CERAMICS  
JANNEY MA - OMATETE OO - NUNN SD - WALLS CA  
GELCASTING

1995  
ORNL  
INSTRUMENTATION AND CONTROLS  
REMEYIK CJ - HYLTON JO - MCKNIGHT TE - HUTCHENS RE  
GRAVIMETRIC GAS FLOW CALIBRATOR

1995  
ORNL  
INSTRUMENTATION AND CONTROLS  
KERCEL SW - DRESS WB - ROCHELLE RW - MOORE MR  
MAGNETIC SPECTRAL RECEIVER

1995

ORNL/EXTERNAL

METALS AND CERAMICS - 3M COMPANY

STINTON, JUDKINS, LOWDEN, AND MCLAUGHLIN (ALL OF ORNL); BAILEY JT,

FISCHER EM, EATON JH, KAHNKE JL,

PYSHER DJ, SMITH RG, WEAVER BL (ALL OF 3M COMPANY, INC.)

3M CERAMIC COMPOSITE FILTER

1994

ORNL

HEALTH SCIENCES RESEARCH

VO-DINH T - PAL A - RAMIREZ L - PAL T

LUMINESCENCE SPOT TEST FOR PCBs

1994

ORNL/EXTERNAL

ENGR PHYS & MATH - EMORY U - U OF TENNESSEE - CARNEGIE-MELLON U

GEIST A - SUNDERAM VS (EMORY U.) - MANCHEK RJ (U. OF TN) - DONGARRA JJ

(U. OF TN) - BEGUELIN AL

PARALLEL VIRTUAL MACHINE (PVM)

1993

ORNL/Y-12/ENGINEERING/EXTERNAL

CHEMISTRY - DEVELOPMENT - ENGR - R&D SOLUTIONS - UNITED CATALYST,  
INC.

TEAM - GRIFFITH, COMPERE, HUXTABLE, GOOGIN, DAVIS (MMES); THORNTON,

ET AL (R&D SOLNS); JERUS & PFENIG

(UNITED CATALYST)

CL2EAN OUT CATALYST AND PROCESS

1993

ORNL

BIOLOGY

MAZUR

CRYOPRESERVATION OF DROSOPHILA EMBRYOS

1993

ORNL

ENGINEERING PHYSICS AND MATHEMATICS - ROBOTICS AND PROCESS  
SYSTEMS

PIN FG - KILLOUGH SM

OMNIDIRECTIONAL HOLONOMIC PLATFORM (OHP)

1992

ORNL

METALS AND CERAMICS

LEE EH-LEWIS MB-MANSUR LK  
HARD SURFACED POLYMERS

1992  
ORNL  
HEALTH AND SAFETY RESEARCH  
VO-DINH T-STOKES DL (UT STUDENT)  
SURFACE-ENHANCED RAMAN OPTICAL DATA STORAGE (SERODS) SYSTEM

1992  
ORNL  
ENERGY/HEALTH AND SAFETY RESEARCH  
CHEN FC-ALLMAN SL-CHEN CH  
CFC/HFC RATIO METER

1992  
ORNL  
ENGINEERING PHYSICS AND MATHEMATICS/BIOLOGY  
UBERBACHER EC-MANN RC-MURAL RJ  
GRAIL

1991  
APPLIED TECHNOLOGY (K-25)  
TECHNICAL  
ANDERSON, RW/NEFF WA  
ENVIRO-CP ELECTROLESS NICKEL BATH RECOVERY BY ION EXCHANGE AND  
PRECIPITATION

1991  
ORNL  
APPLIED TECHNOLOGY  
HAWK LS/TURNER JH  
DIRECT MANUAL BRAILLEWRITER

1991  
ORNL/EXT  
METALS AND CERAMICS/UNIVERSITY OF TENNESSEE  
SIKKA VK/HOBSON DO/ALEXEFF I (U. OF TN)  
ELECTROMAGNETIC LIQUID METAL INCLUSION REMOVAL DEVICE

1991  
ORNL  
INSTRUMENTATION AND CONTROLS/METALS AND CERAMICS  
HOFFHEINS BS/LAUF RJ  
RAPID FUEL ANALYZER

1990  
ORNL  
METALS AND CERAMICS  
MAZIASZ PJ/SWINDEMAN RW  
ORNL HT-UPS (HIGH-TEMPERATURE, ULTRAFINE-PRECIPITATE-  
STRENGTHENED) "LEAN" AUSTENITIC STAINLESS  
STEEL

1990  
ORNL  
METALS AND CERAMICS  
MCKAMEY CG/SIKKA VK/LIU CT  
DUCTILE IRON ALUMINIDES

1990  
ORNL/EXT  
SOLID STATE-VG MICROSCOPES  
PENNYCOOK SJ; BOVEY P (VG MICROSCOPES, LTD., W SUSSEX, ENGLAND)  
VG MICROSCOPES ULTRAHIGH RESOLUTION SCANNING TRANSMISSION  
ELECTRON MICROSCOPE

1990  
ORNL  
HEALTH AND SAFETY RESEARCH  
SRIVASTAVA PC/ALLRED JF  
IODOPHENYLMALEIMIDE RADIOIMMUNOCONJUGATOR

1990  
EX/ORNL/Y12  
ENGELHARD CORPORATION/EHP AND HSR (ORNL)/HSEA (Y-12)  
BENCKE G-BRUMML W-CHAMBERLAIN J-MARTIS C-MCGRODER J-MOSCOVITCH  
M-SMOLKO T-SZALANCZY  
A-VELBECK K (ALL OF ENGELHARD CORP., HARSHAW CRYSTAL AND  
ELECTRONIC PRODUCTS)/AHMED AB  
(ORNL)/BOGARD RS (Y-12)/BUCKNER MA (ORNL)/BOGARD JS (ORNL)  
HARSHAW MODEL 8800 SYSTEM (TRADEMARK)

1989  
ORNL  
HEALTH AND SAFETY RESEARCH  
FERRELL TL/REDDICK RC/WARMACK RJ  
PHOTON SCANNING TUNNELING MICROSCOPE (PSTM)

1989  
ORNL/EXT  
METALS AND CERAMICS/U. OF TENNESSEE

HOBSON DO/SIKKA VK/ALEXEFF I (U. OF TN)  
GASLESS METAL ATOMIZATION AND SPRAY FORMING NOZZLE

1989  
ORNL  
SOLID STATE  
MOOK HA/HAYTER JB  
TRANSMISSION POLARIZER FOR NEUTRON BEAMS

1989  
Y-12/EXT  
DEVELOPMENT/HARRICK SCIENTIFIC CORP., INC.  
POWELL GL; CAMPBELL PJ (HORTON); MILOSEVIC M AND HARRIC NJ (BOTH OF  
HARRICK SCIENTIFIC CORP., INC.)MHP-1 BARREL ELLIPSOID INFRARED  
INSPECTION ACCESSORY

1988  
ORNL  
INSTRUMENTATION AND CONTROLS/A. G. TECHNICAL ASSOC., INC.  
BUTLER P-ALLEN J (CONSULTANT)  
OPSNET

1988  
Y-12/EC  
DEVELOPMENT/PRODUCT CERT./COMP. & TEL./MECHAN. ENGR. (ENGR)  
CARPENTER DA-LAWSON RL-TAYLOR MA-HANEY GW-MORGAN KZ  
HRXRP-5 HIGH RESOLUTION X-RAY MICROPROBE

1987  
ORNL  
INSTRUMENTATION AND CONTROLS  
MOSSMAN CA-MCNEILLY DR-JATKO WB-ANDERSON RL-MILLER GN  
REMOTE SENSOR AND CABLE IDENTIFIER

1987  
ORNL  
METALS AND CERAMICS  
STINTON DP-CAPUTO AJ-LOWDEN RA-BESMANN TM  
FIBER-REINFORCED CERAMIC-COMPOSITE FABRICATION

1987  
ORNL/EXT  
HEALTH AND SAFETY RESEARCH/UNIVERSITY OF TENNESSEE  
VO DINH T-SEPANIAK MJ (U. OF TN)-TROMBERG BJ (GRADUATE STUDENT, U.  
OF TN)-GRIFFIN GD-AMBROSE KRFIBEROPTICS FLUOROIMMUNO SENSOR (FIS)

1987

ORNL/EXT

HEALTH AND SAFETY RESEARCH/U. OF TENNESSEE

CHEN CH-KRAMER SD-MCCANN MP (GRADUATE STUDENT, U. OF TN)

CRYSTAL LASER MONITOR

1987

Y-12

DEVELOPMENT

WRENN GE, JR-HOLCOMBE CE, JR-LEWIS J JR-BERRY L

ZZX-4200 HIGH-TEMPERATURE THERMAL INSULATION STRUCTURES

1986

ORNL

ANALYTICAL CHEMISTRY

BUCHANAN MV-WISE MB

MULTI-MODE IONIZATION DETECTOR (MMID)

1986

ORNL/EXT

HEALTH AND SAFETY RESEARCH/NBS/U OF TENN

CALLCOTT TA-EDERER DL (NATL. BUREAU OF STANDARDS)-ARAKAWA ET-  
TSANG KL (U. OF TN)

UT-ORNL-NBS SOFT X-RAY EMISSION SPECTROMETER

1986

ORNL/EXT

METALS AND CERAMICS/INSTRU AND CONTROLS/CARNEGIE-MELLON U

LAUF RJ-HOFFHEINS BS-EMERY MS-SIEGEL MW (CARNEGIE-MELLON U.,  
PITTSBURGH) (WORK FUNDED BY CABOT

CORP.)

INTEGRATED GAS ANALYSIS AND SENSING (IGAS) CHIP

1985

ORNL

INSTRUMENTATION AND CONTROLS

DAVIDSON JB-CASE AL

EIDEC (ELECTRONIC IMAGE DETECTOR FOR ELECTROPHORESIS AND  
CHROMATOGRAPHY)

1985

ORNL

INSTRUMENTATION AND CONTROLS/ANALYTICAL CHEMISTRY

TODD RA-RAMSAY RS

PULSED HELIUM IONIZATION DETECTOR ELECTRONICS SYSTEM (PHIDELS)

1985  
ORNL  
METALS AND CERAMICS  
LIU KC  
ORNL BIAXIAL HIGH-TEMPERATURE FATIGUE EXTENSOMETER

1985  
ORNL  
METALS AND CERAMICS/CHEMICAL TECHNOLOGY  
LAUF RJ-BOND WD  
ORNL SG-2 METAL OXIDE VARISTOR

1985  
ORNL  
SOLID STATE  
SALES BC-BOATNER LA  
LIP PROCESS FOR HIGH-LEVEL RADIOACTIVE WASTE DISPOSAL

1984  
ORNL  
BIOLOGY  
ADLER HI  
ORNL OXYGEN REDUCING ENZYME

1984  
ORNL  
HEALTH AND SAFETY RESEARCH  
CHEN CH-HURST GS-KRAMER SD-PAYNE MG-ALLMAN SL-PHILLIPS RC  
RARE GAS ATOMS COUNTER

1984  
ORNL  
INSTRUMENTATION AND CONTROLS/FUEL RECYCLE  
SATTERLEE PE-MARTIN HL-HERNDON JN  
SARGENT INDUSTRIES, CENTRAL RESEARCH LABORATORIES DIV. (CRL),  
MODEL M-2 (CONTROL SYSTEM)

1984  
ORNL  
SOLID STATE/INSTRUMENTATION AND CONTROLS  
MOOK HA-SCHULZE GK  
ULTRASONICALLY PULSED NEUTRON TIME-OF FLIGHT SPECTROMETER

1984  
Y-12/EXT

DEVELOPMENT/HARRICK SCI CORP  
POWELL GL-SMYRL NR-HARRICK NJ (HARRICK SCI. CORP.)  
THE Y-12 DIFFUSE REFLECTANCE CELL

1983  
ORNL  
CHEMISTRY  
POSEY FA-PALKO AA  
PROCESSES FOR SILVER RECOVERY FROM PHOTOGRAPHIC AND  
PHOTOREPRODUCTION EFFLUENTS

1983  
ORNL  
METALS AND CERAMICS  
DODD CV-CHITWOOD LD-DEEDS WE  
MULTIPLE-FREQUENCY EDDY-CURRENT TESTING INSTRUMENT

1983  
ORNL  
METALS AND CERAMICS  
LIU CT-KOCH CC  
NIFE ALUMINIDE (NICKEL-IRON ALUMINIDE)

1983  
ORNL  
METALS AND CERAMICS  
SPARKS CJ, JR.-ICE GE-WILLEY M  
X-RAY MONOCHROMATOR: HIGH-PERFORMANCE X-RAY FOCUSING OPTICS  
FOR SYNCHROTRON RADIATION

1983  
ORNL  
SOLID STATE  
WHITE CW-NARAYAN J-APPLETON BR-HOLLAND OW  
SUPERSATURATED SEMICONDUCTOR ALLOYS

1983  
ORNL/EXT  
HEALTH AND SAFETY RESEARCH/U OF GEORGIA  
MILLER JC-COMPTON RN-COOPER CD (U OF GEORGIA)  
VACUUM ULTRAVIOLET SPECTROMETER

1982  
ORNL  
ANALYTICAL CHEMISTRY  
STEWART JH, JR.-KATZENBERGER JM-ROSOVSKY BL

INDUCTIVELY COUPLED PLASMA SPECTROMETER

1982

ORNL

INSTRUMENTATION AND CONTROLS

MILLER GN-ANDERSON RL-ROGERS SC

REACTOR CORE COOLING MEASUREMENT SYSTEM

1982

ORNL

METALS AND CERAMICS

KENNEDY CR-EATHERLY WP

GRAPHNOL N3M BULK GRAPHITE PROCESS

1982

ORNL

METALS AND CERAMICS

SIKKA VK-MCDONALD RE-KING JF-PATRIARCA P-WARD CT-BODINE GC

SUPER 9 CR-1 MO STEEL ALLOY

1982

ORNL

SOLID STATE

BOATNER LA-ABRAHAM MM

MONAZITE PROCESS FOR STABILIZATION OF HIGH LEVEL RADIOACTIVE WASTE

1982

ORNL

SOLID STATE/METALS AND CERAMICS

NARAYAN J-CHEN Y-MORGAN CS-MOORHEAD AJ

HIGH PERFORMANCE CERAMICS THROUGH INCLUSION OF DISPERSED METALS OR METALLIC PRECIPITATES

1981

ORNL

CHEMICAL TECHNOLOGY

MCDOWELL WJ-CASE GN

EXTRACTIVE SCINTILLATOR SPECTROMETER ("PHOTON ELECTRON-REJECTING ALPHA LIQUID SCINTILLATION-PERALS")

1981

ORNL

ENGINEERING TECHNOLOGY

HISE EC-HOLMAN AS

SALA HIGH-GRADIENT MAGNETIC SEPARATOR

1981

ORNL

HEALTH AND SAFETY RESEARCH

CALDWELL PJ-ARAKAWA ET

EXTREME ULTRAVIOLET MONOCHROMATOR

1981

ORNL

HEALTH AND SAFETY RESEARCH

VO-DINH T

PERSONAL ORGANIC COMPOUND VAPOR DOSIMETER ("PASSIVE PNA VAPOR MONITOR")

1980

ORNL

CHEMICAL TECHNOLOGY

SCHURESKO DD

PORTABLE FLUORESCENCE SPOTTER

1980

ORNL

CHEMISTRY/CHEMICAL TECHNOLOGY

HURST FJ-CROUSE DJ

PROCESS FOR URANIUM RECOVERY ("DEPA-TOPO PROCESSED URANIUM)

1980

ORNL/EC

METALS AND CERAMICS/PLANT AND EQUIPMENT/ENGINEERING

WILLEY MG-ANGELINI P-CAPUTO AJ-KIPLINGER D-SUCHOMEL RR

CONTINUOUS-RING PARTICLE BLENDER DISPENSE

1980

Y-12

DEVELOPMENT

SCHREYER JM-SCHMITT CR-ABBATIELLO LA

PLASMASORB-HIGH-TEMPERATURE SOLAR ABSORBING COATING

1979

ORNL

METALS AND CERAMICS/CHEMICAL TECHNOLOGY

LACKEY WJ-HAAS PA-SUCHOMEL RR-BEATTY RL-BEGOVICH JM-KAPPELMANN

FA-STINTON DP-LOTTS

AL-ANGELINI P-CAPUTO AJ-MACK JE-PASTO AE-RYON AD-NOTZ KJ-NORMAN

RE-HAWS CC-LLOYD MH-SPENCE

RD-LONG EL, JR-HARRINGTON FE-HORAK JA-LEUZE RE-DONNELLY RG-  
VAVRUSKA JS  
FABRICATION PROCESS FOR NUCLEAR FUEL (GEL-SPHERE-PAC-PROCESS)

1979  
ORNL  
CHEMICAL TECHNOLOGY  
SCOTT CD-HANCHER CW-LEE DD  
TAPERED FLUIDIZED-BED BIOREACTOR

1979  
ORNL  
METALS AND CERAMICS  
LIU CT-INOUE H-SCHAFFHAUSER AC  
STRUCTURAL ALLOYS (DOT ALLOYS)

1979  
ORNL  
SOLID STATE  
NARAYAN J-YOUNG RT-WOOD RF  
LOW-COST LASER-DIFFUSED SOLAR CELLS

1979  
Y-12  
DEVELOPMENT  
BURKHARDT JH-DAVENPORT CM-HENRY JJ-KITZKE KA-BRANDON GW  
AUTOMATED ADAPTIVE ELECTRON-BEAM WELDING BEAM/SEAM ALIGNMENT  
SYSTEM

1978  
ORNL  
CHEMICAL TECHNOLOGY  
SCOTT CD-CANON RM-SISSON WG-SPENCE RD  
CONTINUOUS ANNULAR CHROMATOGRAPH (CAC)

1978  
ORNL  
HEALTH PHYSICS  
GOANS RE; CANTRELL JH (CONSULTANT, U OF TN WHEN SUBMITTED;  
LANGLEY RES CENTER, HAMPTON VA WHEN  
IT WON)  
ULTRASONIC BURN DIAGNOSTIC UNIT

1978  
Y-12/EXT  
DEVELOPMENT/LANL/LLNL/AIR FORCE

WHITTEN LG, ET AL (Y-12); JONES FW, STEGER PHIL, ET AL (Y-12); REICHELT W  
(LANL); BRYAN JB (LLNL); SAITO  
TT, PRATER R AND PARSONS R (AF)  
DIAMOND MACHINING OF OPTICS

1978

Y-12

DEVELOPMENT

SCHREYER JM-WHITEHEAD HD-SCHMITT CR-GOOGIN JM  
MICROSORB-SOLAR SELECTIVE CARBON COATING

1977

ORNL

CHEMICAL TECHNOLOGY/INSTRUMENTATION AND CONTROLS

SCOTT CD-MROCHEK JE-GENUNG RK-JOHNSON WF-BAUER ML-BURTIS CA-  
LAKOMY DG

PORTABLE CENTRIFUGAL FAST ANALYZER

1977

ORNL

HEALTH PHYSICS

HURST GS; NAYFEH NH; YOUNG JP; PAYNE MG; AND WAGNER EB  
ONE-ATOM DETECTOR

1977

ORNL

INSTRUMENTATION AND CONTROLS/U OF TENN

BORKOWSKI CJ-BLALOCK TB

JOHNSON NOISE POWER THERMOMETER (INDUSTRIAL PROTOTYPE SYSTEM,  
IPS-2)

1977

ORNL

MAN PROGRAM

BREILLATT JP-SARTORY WK-WILLIS DD-REMEYNIK CJ

AUTOMATED THREE-STATE CENTRIFUGAL LEUKAPHERESIS SYSTEM  
(CYTRIAGE)

1977

ORNL

METALS AND CERAMICS

HENDRICKS RW

SMALL-ANGLE X-RAY SCATTERING SYSTEM (ORSAXS)

1977

Y-12

DEVELOPMENT  
LAGGIS EG-STROHECKER JW-FRANCKE HC  
NITRATE RECYCLE AND DISPOSAL PROCESS

1976  
ORNL  
METALS AND CERAMICS/GEORGIA TECH  
CHAPMAN AT-CLARK GW  
DIRECTIONALLY SOLIDIFIED METAL OXIDE-METAL EUTECTIC COMPOSITES

1976  
ORNL  
SOLID STATE  
KOBISK EH-QUINBY TC  
CERAMIC WIRE NEUTRON DOSIMETRY MATERIALS

1976  
ORNL/Y-12  
CHEMISTRY/DEVELOPMENT  
GRIFFITH WL-COMPERE AL-GOOGIN JM  
ANAEROBIC UPFLOW PACKED BED BIOREACTOR ("ACTIFIL ANFLOW  
SYSTEMS")

1975  
ORNL  
SOLID STATE  
CHEN Y-ABRAHAM M  
PROCESS FOR GROWING LARGE, TOTALLY-TRANSPARENT CRYSTALS OF  
ALKALINE EARTH OXIDES

1971  
ORNL  
CHEMICAL TECHNOLOGY/BIOLOGY/MAN PROGRAM  
SCOTT CD-ANDERSON NG-PITT WW, JR-JOHNSON WF  
THE ORNL ULTRAVIOLET ANALYZER

1969  
ORNL/K-25  
BIOLOGY/QUALITY AND TECHNICAL SERVICES ?  
HARRIS WW-ANDERSON NG-MASHBURN DN  
"GEMSAEC" AUTOMATED MULTI-SAMPLE SPECTROPHOTOMETER

1967  
ORNL  
ANALYTICAL CHEMISTRY  
ROSS HH

## RADIOISOTOPIC LIGHT SOURCE

### **Federal Laboratory Consortium (National) Awards for Excellence in Technology Transfer** Historical Oak Ridge Honorees

P. W. King  
01/28/2004

c:\AAASave Documents\FLC, Historical Winners.doc

2004

Dudney, Nancy J.; Bates, John B.; Neudecker, Bernd J.; Choudhury, Ashok; Luck, Chris F. and Gruzalski, Greg R.

ORNL/EXT - Condensed Matter Sciences; SNS Accelerator Systems; Subcontractor; Technology Commercialization; Physical Sciences Directorate

**“Thin Film Rechargeable Lithium Batteries”**

(NOTE: Also won 2003 Southeast Region FLC Award)

2004

Ramsey, J. M.; Jacobson, Stephen C.; Ramsey, Roswitha S.; and Choudhury, Ashok

ORNL - Chemical Sciences; Technology Commercialization

**“Lab-on-a-Chip”**

(NOTE: Also won 2003 Southeast Region FLC Honorable Mention Award)

2004

Smith, SF; Hanson, GR; Moore, MR; Jones, JP; Lenarduzzi, R; Emery, MS; Turner, GW; Ericson, MN.; McKnight, TE.; Hylton, JO.; Moore, JA.; Wintenberg, AL.; Dress, WB; Ewing, PD; Vanderhoofven, G--- Peterson; Maxwell; Smith---Dobson; Blair; and Sullivan

ORNL/EXT - Engineering Science and Technology; Technology Commercialization; Tarallax Wireless, Inc.; Navigational Sciences, Inc.

**“Robust Wireless Technologies for Extreme-Environment Communications”**

(NOTE: Also won 2003 Southeast Region FLC Project of the Year Award)

2004

Thundat, George Thomas; Hu, Zhiyu; and Miller, Russ

ORNL - Life Sciences; Technology Commercialization

**“Microcantilever-Based Biosensors: VeriScan (trademark) 3000 Real-Time Biodetector”**

(NOTE: Also won 2003 Southeast Region FLC Award)

2003

T. M. Besmann, T. D. Burchell, J. J. Henry, Jr., and J. W. Klett (ORNL) -- and David Haack, et. al (Porvair Fuel Cell Technology)

ORNL/EXT - Metals and Ceramics; Porvair Fuel Cell Technology

"ORNL Carbon Composite Bipolar Plate: Lightweight Electrodes for Fuel Cells"  
(NOTE: Also won 2003 Southeast Region FLC Award)

2003

M. J. Doktycz and J. S. Hicks (external, affiliated w/ Engineering Division) -- and James Johnson  
(Innovadyne Technologies, Inc.)

ORNL/EXT - Life Sciences; Innovadyne Technologies, Inc.

"ASAP (trademark): Any Source, Any Position Fluid-Handling Device"

(NOTE: Not submitted in 2003 Southeast Region competition)

2003

R. K. Ferrell, S. S. Gleason, W. B. Jatko, T. P. Karnowski; K. W. Tobin and B. R. Whitus (ORNL) -- and  
Amos Dor, et. al (Applied Materials, Inc.)

ORNL/EXT - Engineering Science and Technology; Applied Materials, Inc.

"Automated Image Retrieval for Semiconductor Yield Improvement"

(NOTE: Also won 2003 Southeast Region FLC Award)

2003

D. Xu, Y. Xu and V. Olman

ORNL - Life Sciences

"**Expression Data Clustering Analysis and Visualization Resource (EXCAVATOR)**"

(NOTE: Also won Honorable Mention, 2003 Southeast Region FLC Award)

2002

Hardy, Jim; Hanson, Greg; Simpson, John; Rasmussen, Dave; Bingham, Philip; Hylton,  
Kathy; Tobin, Ken; Chidley, Matt; Price, Jeff; Turner, John; Goddard, Jim; Schaich,  
Chuck; and Baylor, Larry

ORNL - Engineering Science and Technology; Fusion Energy

"**Direct-to-Digital Holography for High-Speed, High Resolution Defect Inspection**"

(NOTE: Also won 2001 Southeast Region FLC Award)

2001

Parens Paranthaman, Donald Kroeger, David Christen, Amit Goyal, Ron Feenstra, Fred  
List, Dominic Lee, David Beach, Eliot Specht, David Norton and Bob Hawsey

ORNL - Chemical and Analytical Sciences Division, Metals and Ceramics Division, Solid  
State Division, and Energy Efficiency and Renewable Energy Program

"**RABiTS: Substrate for Second-Generation Superconducting Wire**"

(NOTE: Also won 2000 Southeast Region FLC Award)

2001

James Klett, Ashok Choudhury and Timothy Burchell

ORNL - Metals and Ceramics, Technology Transfer and Economic Development

"**High Thermal Conductivity Graphite Foam**"

(NOTE: Also won 2000 Southeast Region FLC Award)

2001

9with the team of Thomas Thundat, Robert Warmack, Charles Britton and Grady  
Vanderhoofven.

ORNL - Life Sciences, Instrumentation and Controls, and Technology Transfer and Economic Development

**"Microcantilevers: Versatile Microscopic Sensors"**

2001

with the team of Vinod Sikka, Craig Blue, Barry Whitson and Madu Chatterjee.

ORNL - Metals and Ceramics, Plant and Equipment

External; Delphi Automotive Systems

**"Polymer Boot Heater to Improve Vehicle Assembly-Line Ergonomics and Production"**

2000

Larry Dickens

Technology Transfer and Economic Development

**"Commercialization Manager of the year, FLC, Southeast Region"**

1999

William J. Madia (former Director, PNNL)

Laboratory Director of the Year

**"For his leadership in technology transfer during his tenure at PNNL"**

1998

Stephen M. Killough

ORNL - Robotics and Process Systems Division

"For technology that enables a set of wheels to drive robotic platforms in an omnidirectional manner, which was transferred to the wheelchair industry for a prototype wheelchair that can be driven omnidirectionally"

1998

Kenneth W. Tobin, Jr.; Shaun S. Gleason; and Thomas P. Karnowski

ORNL - Instrumentation and Controls Division

**"For transferring Spatial Signature Analysis research to the semiconductor manufacturing industry"**

1997

Lynn A. Boatner and Ron Feenstra

ORNL - Solid State Division

"For the development and production of new single-crystal substrates for the growth of epitaxial electro-optic and superconducting thin films"

1996

Barbara S. Hoffheins and Robert J. Lauf

ORNL - Instrumentation and Controls and Metals and Ceramics Divisions

**"For collaboration with the DuPont Electronics Co. in developing a new hydrogen sensor"**

1996

Ogbemi Omatete and Claudia Walls

ORNL - Metals and Ceramics Division

**"For gelcasting process for making complex shapes"**

1996

David Stinton and Roddie Judkins  
ORNL - Metals and Ceramics Division

**“For their work with 3M to improve and commercialize ORNL’s patented ceramic”**

1995

Timothy C. Scott  
ORNL - Chemical Technology

**“For a new solvent extraction device called the Emulsion Phase Contactor”**

1995

Tuan Vo-Dinh (Health Sciences Research), M. Guven Yalcintas (formerly Office of Technology Transfer), R. Russell Miller (Office of Technology Transfer), L. Wayne Scarbrough (formerly ORNL Public Affairs), and Lou Lome (Dept. of Defense - Ballistic Missile Defense Organization)  
ORNL, Lockheed Martin Energy Systems, Inc.; and Department of Defense - Health Sciences Research; Office of Technology Transfer; ORNL Public Affairs; and Ballistic Missile Defense Organization

**“For a new optical data storage method known as SERODS”**

1993

Don Bible and Robert J. Lauf  
ORNL - Instrumentation and Controls Division

**“For developing and licensing a variable frequency microwave furnace.”**

1992

Robert J. Lauf  
ORNL - Metals and Ceramics Division

1991

William L. Griffith, Alicia L. Compere, William P. Huxtable, John M. Googin  
ORNL - Chemistry Division; Technical Operations, Process Engineering Division; Y-12 Development Division

**“For inventing, licensing, etc., a process to dechlorinate waste streams”**

1990

G. E. Courville  
ORNL - Energy Division

1990

J. O. Stiegler  
ORNL - Metals and Ceramics Division

1989

V. J. Tennery  
ORNL - Metals and Ceramics Division

1988

J. R. Weir, Jr.  
ORNL - Metals and Ceramics Division

**“For ORNL Materials Highlights”**

1987

S. A. Meacham and E. C. Bradley  
ORNL - Fuel Recycle Division

**“For development of ORNL's first agreement involving licensing of both patents**

## **and copyrights”**

1986

T. N. Tieggs and P. F. Becher  
ORNL - Metals and Ceramics Division

**“For the transfer of silicon carbide whisker-alumina composite”**

1986

K. W. Haff, J. A. Tompkins, D. W. Ramey, and E. Newman  
ORNL - Operations Division

**“For the radioluminescent Light Development (RL) Program”**

1985

T. Vo-Dinh, M. S. Blair, and E. J. Soderstrom  
ORNL - Health and Safety Research Division

**“Fiberoptics Luminoscope”**

1985

V. K. Sikka, C. T. Liu, A. C. Schaffhauser, and E. J. Soderstrom  
ORNL - Metals and Ceramics Division

**“Nickel-Iron Aluminide Alloys”**

## **DISCOVER AWARDS ORNL, HISTORICAL WINNERS**

P. W. King  
06/06/2001

c:\AAASave Documents\Discover Awards, Historical Winners and Finalists.doc

## **2000**

### **WINNER**

Thomas G. Thundat, Moonis Ally, Zhiyu Hu and Panos Datskos  
Life Sciences, Energy, Engineering Technology

**"Micromechanical Land Mine Detector"**

## **1998**

### **FINALIST**

Michael L. Simpson, Instrumentation and Controls

**"Critters on a Chip"**

FINALIST

Thomas G. Thundat, Patrick I. Oden, and Robert J. Warmack  
Life Sciences

**"Micromechanical Infrared Imager"**

**1997**

WINNER, CHRISTOPHER COLUMBUS FOUNDATION AWARD

Jonathan Woodward, Chemical Technology

**"Enzymatic Conversion of Sugar to Hydrogen"**

FINALIST

Stephen M. Killough, Robotics and Process Systems

**"Omnidirectional Vehicle Platform"**

**1996**

FINALIST

J. Michael Ramsey, Chemical and Analytical Sciences

**"The Incredible Shrinking Lab" (Laboratory on a Chip)**