

02/11/2010

NOBEL PRIZES HONOREES ASSOCIATED WITH OAK RIDGE

02/11/2010

Eugene Wigner (deceased 01/01/1995)
1963 Nobel Prize in Physics
(co-winner with Maria Goeppert Mayer and Hans Jensen)

Wigner was cited for his early (late 1920s) work in the theory of symmetries in quantum mechanics, which precedes Oak Ridge National Laboratory, and also for developing and successfully applying new ideas and methods to "some of the most fundamental problems in physics," many of which did occur during his association with ORNL that spanned from the Manhattan Project into the 1970s.

Clifford G. Shull (deceased 03/31/2001)
1994 Nobel Prize in Physics
(co-winner with Bertram N. Brockhouse)

Shull was cited for his development of the neutron diffraction technique. Shortly after World War II, Shull, working with Ernest O. Wollan at ORNL's Graphite Reactor, laid the foundation for determining molecular structure that has grown into neutron scattering research. Shull left ORNL for the Massachusetts Institute of Technology in 1955, but his seminal neutron crystallography discoveries occurred at ORNL.

2007 Nobel Peace Prize

It should be noted that a number of ORNL (and DOE) scientists contributed to the United Nations' Intergovernmental Panel on Climate Change that shared the 2007 Nobel Peace Prize with Al Gore, "for their efforts to build up and disseminate greater knowledge about man-made climate change, and to lay the foundations for the measures that are needed to counteract such change." ORNL's two most prominently cited contributing IPCC authors were Thomas J. Wilbanks and David L. Greene.

Other ORNL Contributors to the Work:

Brown, Marilyn A.
Dale, Virginia H.
Drake, John B.
Erickson, David J., III
Hanson, Paul J.
Marland, Gregg
Shriner, David S.
Wright, Sherry B.

OTHER NOTABLE ASSOCIATIONS

2009 Nobel Prize in Chemistry

Ramakrishnan, Venkatraman (MRC Laboratory of Molecular Biology, UK); Steitz, Thomas A. (Yale University, Howard Hughes Medical Institute); and Yonath, Ada E. (Weizmann Institute of Science, Israel)

“For studies of the structure and function of the ribosome”

NOTES: Dr. Ramakrishnan was known as "Venki" at ORNL and conducted neutron scattering experiments at the HFIR in the early 1980s. Reference - Ed Uberbacher says: Dr. Venkatraman Ramakrishnan was an ORNL staff member briefly (around 1982 and 1983) in the Solid State Division. He lead development of the biological neutron scattering effort originally founded by Ed Uberbacher and Gerry Bunick. The ribosome studies were started prior to his coming to ORNL with Don Engelman and perhaps continued afterward. His more recent work with x-ray crystallography, more than the earlier neutron work, led to the insights reflected in the Prize.

Other Work at ORNL that was closely associated with work that resulted in Nobel Prizes for others:

- 1) Crossed-beam molecular chemistry
[1986 - Sheldon Datz and Ellison Taylor]
- 2) Messenger RNA
[1965 - Elliot (Ken) Volkin and Lazarus Astrachan]

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 SARDI CARNOT AWARD for ENERGY CONSERVATION AND RENEWABLE ENERGY (U.S. DEPARTMENT OF ENERGY SCIENCE AND TECHNOLOGY AWARDS)

Roger S. Carlsmith (1996)

ERNEST ORLANDO LAWRENCE AWARD OAK RIDGE

02/06/2007

ORNL

Steven J. Zinkle (2007, Nuclear Technology)

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

10/02/2007

NAE:

Jeffrey Wadsworth (2005) ***

Allan S. Hoffman (2005) previously Assistant Director of M.I.T. Practice
School at ORNL

Chain T. Liu (2004) presently at University of Tennessee ***

Jack J. Dongarra (2001) presently at University of Tennessee ***

John H. Gibbons (1994) worked at ORNL in the past but not here when elected

Alvin W. Trivelpiece (1993) retired ***

Jim Callen, (1990) previously worked at ORNL but at the University of Wisconsin

when elected

Milton C. Edlund (1990) previously worked at ORNL but somewhere else when elected; deceased – 1993

Murray W. Rosenthal (1990, retired) ***

John M. Googin (1988) worked at Y-12 ... not ORNL; deceased - January 1994 ***

Frank L. Parker (1988) Vanderbilt University, but affiliated with programs at ORNL

Charles D. Scott (1986) retired ***

George R. Jasny (1983) worked at other Oak Ridge facilities ... not at ORNL;
deceased - December 2001 ***

Herbert G. MacPherson (1978) deceased - January 1993 ***

Robert A. Charpie (1975) left ORNL after several years in Oak Ridge

Alvin M. Weinberg (1975) deceased - October 2006 ***

Floyd L. Culler (1974) left ORNL after several years in Oak Ridge,
deceased - September 2004 ***

William D. Manly (1974) deceased - November 2003

NAS:

E. Ward Plummer (2006) ***

Monica Turner (2004)

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) *** deceased - 2003

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, deceased - October 2006) ***

David M. Bonner (1959), deceased -1964

A. Hollaender (1957), deceased - 1990? ***

Eugene P. Wigner (1945), deceased - 1995

Samuel Colville Lind (1930), deceased - 1965

*** Elected while at ORNL

PRESIDENTIAL EARLY CAREER AWARDS FOR SCIENTISTS AND ENGINEERS ORNL'S HISTORICAL WINNERS

07/16/2009

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

Gary A. Baker (Chemical Sciences Division) - 2008

For his outstanding research and pioneering achievements in the areas of materials science and environmentally-responsible chemistry that are leading to new paradigms in the separation sciences, chemical analysis, biomass processing, fuel cell technology, and energy storage applications

Daniel W. Bardayan (Physics Division) - 2005

For his innovative precision nuclear spectroscopy measurements at the ORNL Holifield Radioactive Ion Beam Facility clarifying the production of elements and radioisotopes in exploding stars

Jeffery C. Blackmon (Physics Division) - 2002

For pioneering work in implementing a program of measurements at the ORNL Holifield Radioactive Ion Beam Facility with radioactive nuclear beams to understand stellar explosions

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

Ho Nyung Lee (Materials Science and Technology Division) - 2006

For his pioneering development of experimental methods and theoretical understanding leading to the atomic-scale synthesis by pulsed-laser deposition of ultra thin complex oxide heterostructures and completely artificial superlattice crystals with designed-in functionalities

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

Jian Shen (Condensed Matter Sciences Division) - 2003

For his pioneering approach to the study of magnetism in nanostructured materials

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

NOTES

Jacob L. Jones, (Neutron Scattering Science Division) - 2009

07/14/2009 ORNL Today:

DoD PECASE winner

Jacob Jones, a summer visitor from the University of Florida's materials science and engineering department, also was notified that he has received a PECASE under the Department of Defense. His project, "Domain Wall Motion in Phase Transforming

Oxides," features real-time neutron and x-ray diffraction studies done at ORNL, Argonne's Advanced Photon Source and ANSTO in Australia. His proposal was supported by the Neutron Scattering Science Division's Xun-Li Wang and Mark Hagen.

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

(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."

Stephen E. Nagler (Neutron Scattering Science Division) - 1986

01/02/2008 Reference - Corporate Fellow biography for web page: Named a Presidential Young Investigator by the National Science Foundation.

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

Andrey Zheludev, (Neutron Scattering Science Division) - 2000

11/09/2007 John Budai informed P. W. King that Andrey Zheludev won the PECASE in 2000 when he was at Brookhaven National Laboratory, before he came to ORNL. I confirmed this by referring to my files.

UT/ORNL DISTINGUISHED SCIENTISTS

02/11/2010

NOTE: The Distinguished Scientists program was established in 1984.

Current Appointments

Elbio Dagotto (2004)
Takeshi Egami (2003)
Jimmy Mays (2002)
Joseph Macek (1988)
Georges Guichon (1987)
David Joy (1987)
Robert Hatcher (1986)

Other Historical Appointments

Thom Dunning (2002)
Peter Cummings (1994)
Ward Plummer (1992)
Jack Dongarra (1989)
Jack Weitsman (1989)
Francis E. Close (1988)
Bernard Wunderlich (1988)
J. Alan George (1986)
Philip Siemens (1986)
Robert E. Uhrig (1986)
David White (1986; deceased - 2006)
Jerry Mahan (1984)

**University of Tennessee - ORNL
Governor's Chairs - Appointments**

02/11/2010

UT - ORNL Governor's Chair		
NAME	DIVISION	AWARD

UT - ORNL Governor's Chair		
NAME	DIVISION	AWARD
Zawodzinski, Thomas A.	Materials Science and Technology; University of Tennessee	Governor's Chair, UT-ORNL, for Electrical Energy Storage (5th such appointment)
Hall, Howard	Global Nuclear Security Technology; University of Tennessee	Governor's Chair, UT-ORNL, for Global Nuclear Security
Loeffler, Frank	Biological and Environmental Sciences Directorate; University of Tennessee	Governor's Chair, UT-ORNL, for Microbiology and Civil and Environmental Engineering (6th such appointment)
Smith, Jeremy	Biological and Environmental Sciences Directorate; University of Tennessee	Governor's Chair, UT-ORNL, for Neutron Science
Sokolov, Alexei	Chemical Sciences; University of Tennessee	Governor's Chair, UT-ORNL, for Polymer Science
Liu, Yilu	Energy and Transportation Science; University of Tennessee	Governor's Chair, UT-ORNL, for Power Electronics

Battelle Distinguished Inventors - Historical

02/11/2010

Inducted in 2010:

Charles L. Britton Jr.
Elias Greenbaum

Inducted in 2009:

Gregory R. Hanson

Inducted in 2007:

Mark A. Janney - UT-Battelle (ORNL)

Michael L. Simpson

Inducted in 2006:

John S. Hsu

Arthur J. (Artie) Moorhead

Stephen F. Smith

Inducted in 2005:

John B. Bates - UT-Battelle (ORNL)

James W. Klett

Russ F. Knapp, Jr.

Robert J. Lauf - UT-Battelle (ORNL)

Inducted in 2003:

Timothy D. Burchell

Amit Goyal

Donald M. Kroeger

Chain Tsuan Liu

Rodney A. McKee

Mariappan (Parans) Paranthaman

J. Michael Ramsey

Vinod K. Sikka

Thomas George Thundat

Terry N. Tiegs

Tuan Vo-Dinh

NOTE: Those designated as "UT-Battelle (ORNL)" are not recognized by Battelle Memorial Institute.

**R&D 100 WINNERS
ORNL, Y-12, AND K-25
HISTORICAL**

10/09/2009

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

2009

TITLE: AFA: Alumina-Forming Austenitic Stainless Steels

Submitter: Oak Ridge National Laboratory

Developers:

Michael P. Brady (Inventor or Principal Investigator)

Yukinori Yamamoto

Phil J. Maziasz

Michael L. Santella

Bruce A. Pint

Chain T. Liu (University of Tennessee, retired from ORNL)

Zhao Ping Lu (University of Science and Technology, Beijing, China, formerly ORNL)

David P. Stinton

James R. Keiser

Vinod K. Sikka (retired from ORNL)

Ian G. Wright

2009

TITLE: Superconducting “Wires” by Epitaxial Growth on SSIFFS™

Submitter: Oak Ridge National Laboratory

Developers:

Amit Goyal (Inventor or Principal Investigator)

John Outwater (Sapphire Systems, Inc.)

Sung-Hun Wee (ORNL/University of Tennessee)

Eliot D. Specht

Yuri Zuev (ORISE postdoctoral fellow)

Claudia Cantoni

Dominic F. Lee

James R. Thompson

2009

TITLE: Fire-Resistive Phase Change Material

Submitter: Oak Ridge National Laboratory

Joint Submitters:

Microtek Laboratories, Inc. (Dayton, OH)
Advanced Fiber Technology (Bucyrus, OH)

Developers:

Oak Ridge National Laboratory

Jan Kosny (Inventor or Principal Investigator)
David Yarbrough

U.S. Department of Energy

P. Marc LaFrance

Microtek

Tim Riazzi
Dan Davis
Dale Work

Advanced Fiber Technology

Doug Leuthold

2009

TITLE: Thermomagnetic Processing (TMP) Technology

Submitter: Oak Ridge National Laboratory

Joint Submitters:

Eaton Corporation (Southfield, MI)
American Magnetics, Inc. (Oak Ridge, TN)
Ajax TOCCO Magnethermic Corporation (Boaz, AL)

Developers:

Oak Ridge National Laboratory

Gerard M. Ludtka (Inventor or Principal Investigator)

Gail Mackiewicz-Ludtka
Roger A. Kisner
John B. Wilgen
Edward C. Hatfield
Craig A. Blue
Vinod K. Sikka (Ross Technology Corp., formerly with ORNL)
Roger A. Jaramillo (Special Metals Corp., formerly with ORNL)

Eaton Corporation

Aquil Ahmed
Alexander Bogicevic
John A. Kovacich

American Magnetics, Inc.

Paul Arakawa
Ronny Efferson
Grey Laughon
Aashish Chourey

Ajax TOCCO Magnethermic Corporation

Rich H. McKelvey
Ronald R. Akers
George D. Pfaffmann

2009

TITLE: Mass-Independent Kinetic-Energy-Reducing Inlet System for Mass Spectrometers

Submitter: Oak Ridge National Laboratory

Developers:

Peter T. A. Reilly (Inventor or Principal Investigator)
Hideya Koizumi (07/27/2009 Added, per Peter Reilly)
William B. Whitten (07/27/2009 Added, per Peter Reilly)
Tom J. Whitaker, Atom Sciences (07/27/2009 Added, per Peter Reilly)

2009

TITLE: MELCOT: Methodology for Estimating the Life of Power Line Conductor-Connector Systems Operating at High Temperatures

Submitter: Oak Ridge National Laboratory

Joint Submitters:

Electric Power Research Institute (Palo Alto, CA)
Tennessee Valley Authority (Chattanooga, TN)
PBS&J, Inc. (Dallas, TX)

Developers:

Jy-An John Wang
Edgar Lara-Curzio
Thomas J. King Jr.

2009

TITLE: Artificial Retina

Submitter: Lawrence Livermore National Laboratory

Joint Submitters:

Argonne National Laboratory
Los Alamos National Laboratory
Oak Ridge National Laboratory
Sandia National Laboratories
United States Department of Energy
California Institute of Technology
Doheny Eye Institute (University of Southern California, Keck School of Medicine)
North Carolina State University
University of California at Santa Cruz
Second Sight[®] Medical Products, Inc.

Inventors or Principal Developers:

Orlando Auciello, Argonne National Laboratory
Satinderpall Singh Pannu, Lawrence Livermore National Laboratory
John George, Los Alamos National Laboratory
Elias Greenbaum, Oak Ridge National Laboratory
Kurt O. Wessendorf, Sandia National Laboratories
Dean A. Cole, United States Department of Energy
Wolfgang Fink, California Institute of Technology
Mark Humayun, Doheny Eye Institute
Gianluca Lazzi, North Carolina State University
Wentai Liu, University of California at Santa Cruz

Robert J. Greenberg, Second Sight® Medical Products, Inc.

Additional Developers List

Argonne National Laboratory:

Bing Si (Postdoctoral Researcher)

Wei Li (Postdoctoral Researcher)

Lawrence Livermore National Laboratory:

Phillipe Tabada

William Benett

James Courtney Davidson

Terri Delima

Emil Geiger

Julie Hamilton

Los Alamos National Laboratory:

Andrew M. Dattelbaum

Michael I. Ham (Postdoctoral Research Associate)

Garrett Kenyon

Jurgen G. Schmidt

Oak Ridge National Laboratory:

Charlene A. Sanders

California Institute of Technology:

Mark A. Tarbell

Doheny Eye Institute:

Developer Name: James Weiland

Gerald Chader

Lindy Yow

Hossein Ameri

Brooke Basinger

Leanne Chan

Konstantin Kolev
Lucien Laude
Atoosa Lotfi
Anderson Pinto
Aditi Ray
Adrian Rowley
Biju Thomas

North Carolina State University:

Carlos Cela (Graduate student)
Keyoor Gosalia (Graduate student)
Amit Qusba (Graduate student)
Stefan Schmidt (Graduate student)
Vinit Singh (Graduate student)
Shruthi Soora (Graduate student)
Zhi Yang (Graduate student)

University of California at Santa Cruz:

LiHsien Wu (Graduate student)
Jungsuk Kim (Graduate student)
Moo Sung Chae (Graduate student)
Linh Hoang (Graduate student)
KuanFu Chen (Graduate student)
Mingcui Zhou, Ph.D. (Graduate student)

Second Sight Medical Products Inc.

Alfred E Mann
Avraham I. Caspi
Richard Agustin Castro
Rongqing Dai
Anne-Marie De Merlier Ripley
Jessy Dorn
Sanjay Gaikwad
Amy Hines
Karl-Heinz Ihrig
Mohamed Khaldi
James S. Little
Scott M. Loftin
Pishoy Maksy
Kelly McClure

Matthew J. McMahon
Brian Mech
Jordan Neysmith
Jerry Ok
Arup Roy
Neil H. Talbot
Neha Vyas
Donald A. Webber
Sumit Yadav
Qingfang Yao
Chunhong Zhou
DaoMin Zhou

2009

TITLE: PulseForge 3100 with Pulse Thermal Processing

Submitter: NovaCentrix Corporation (Austin, TX)

Joint Submitter:

Oak Ridge National Laboratory

Developers:

NovaCentrix

Stan Farnsworth
Kurt Schroder
Doug Jackson
Steven McCool
Dave Pope
Ted Kierzyk
Doug Lind
Ian Rawson
Ron Sommers

Oak Ridge National Laboratory

Craig Blue
Art Clemons
Nancy Dudney
Chad Duty
David Harper
Ron Ott
John Rivard (DARPA/DSO Contract Support)

Adrian Sabau

2008

TITLE: Adaptive Band Excitation Controller and Software for Scanning Probe Microscopy

Submitted by: Oak Ridge National Laboratory

Joint Submitters: Asylum Research Corporation (Santa Barbara, California)

Developers: Sergei V. Kalinin (Center for Nanophase Materials Sciences Division)

Stephen Jesse (postdoctoral fellow)

Roger Proksch (Asylum Research Corp.)

2008

TITLE: Cratos V™: A Nano-Wool Product Derived from Carbon Nanotubes

Submitted by: Oak Ridge National Laboratory

Joint Submitters: Babcock & Wilcox Technical Services Y-12, LLC (B&W Y-12, Oak Ridge, Tennessee)

Developers:

ORNL: Paul A. Menchhofer (Materials Science and Technology Division)

Vinod K. Sikka (Consultant - formerly Materials Science and Technology Division)

Fred C. Montgomery (Materials Science and Technology Division)

B&W Y-12: Roland D. Seals

2008

TITLE: Laser-Induced Fluorescence Composite Heat Damage Detector

Submitted by: Oak Ridge National Laboratory

Joint Submitters: Galt Technologies, LLC (Knoxville, Tennessee)

Developers:

ORNL: Chris J. Janke (Materials Science and Technology Division)
Art Clemons (Department of Defense Programs)
Cliff Eberle (Materials Science and Technology Division)
Curt Maxey (Energy and Transportation Science Division)
John Storey (Energy and Transportation Science Division)

Galt Technologies, LLC: Walt Fisher
Eric Wachter
Josh Fisher

2008

TITLE: NanoSH™ Superhydrophobic Technology

Submitted by: Oak Ridge National Laboratory

Joint Submitters: Ross Technology Corporation (Leola, Pennsylvania)

Developers:

ORNL: John T. Simpson (Measurement Science and Systems Engineering
Div.)
Brian R. D'Urso (Measurement Science and Systems Engineering
Div.)
Steve R. McNeany (Measurement Science and Systems
Engineering Div.)
Vinod K. Sikka (Consultant - formerly Materials Science and
Technology
Division)

Ross Technology Corporation: Donald E. Speicher
Andrew K. Jones

2008

TITLE: SpaciMS: Spatially Resolved Capillary Inlet Mass Spectrometer

Submitted by: Cummins, Inc. (Columbus, Indiana)

Joint Submitters: Oak Ridge National Laboratory
Queen's University Belfast, School of Chemistry & Chemical
Engineering (Belfast, UK)
Hiden Analytical (Warrington, UK)
Babcock & Wilcox Technical Services Y-12, LLC (B&W Y-12, Oak
Ridge, Tennessee)

Developers:

Cummins, Inc.: Neal W. Currier
Aleksy Yezerets

ORNL: William P. Partridge, Jr. (Energy and Transportation Science
Division)
Jae-Soon Choi (Energy and Transportation Science Division)
John M. Storey (Energy and Transportation Science Division)
Sam A. Lewis (Energy and Transportation Science Division)

CentACat, Queen's University Belfast: Alexandre Goguet
Christopher Hardacre

Hiden Analytical: David Lundie
Terry Whitmore
Adrian Jessop

B&W Y-12: Gerald L. DeVault
Robert W. Smithwick III

2008

TITLE: 2-MGEM, Optical Anisotropy Factor Measurement System

Submitted by: Hinds Instruments, Inc. (Hillsboro, Oregon)

Joint Submitters: Oak Ridge National Laboratory

Developers:

Hinds Instruments, Inc.: Doug Mark
Baoliang (Bob) Wang
Andy Breninger
Tarik Hadid
Chad Mansfield
Bob Lakanen
Abebe Gezahegn

ORNL:
Division) Gerald E. Jellison (Materials Science and Technology

John D. Hunn (Materials Science and Technology Division)
Christopher M. Rouleau (Center for Nanophase Materials
Sciences Division)

2007

Materials Science and Technology; Department of Defense Programs and External
Institutions: International Titanium Powder, Inc.; BAE Systems; AMETEK; National
Energy Technology Laboratory; Red Devil Brakes; and Army Research Laboratory

Submitted by: International Titanium Powder, Inc.

Joint Submitters: Oak Ridge National Laboratory
BAE Systems
AMETEK
National Energy Technology Laboratory
Red Devil Brakes
Army Research Laboratory

Developers:

International Titanium Powder, Inc.: Donn Reynolds
Stanley S. Borys
Richard Paul Anderson
Grant Crowley
Arthur Wong
Taras Lyssenko

William Ernst
Lance Jacobsen
Dariusz Kogut

Oak Ridge National Laboratory:

Craig A. Blue
Jim O. Kiggans, Jr.
Stephen Nunn
Phil Sklad
William H. Peter (post doctoral fellow)
John Rivard (post doctoral fellow)
Art Clemons

BAE Systems:

T. James Dorsch

AMETEK:

Clive Scorey
Charlie Yu
Joe Capone

National Energy Technology Laboratory: Paul Turner

Stephen J. Gerdemann
Paul Jablonski

Red Devil Brakes:

Jerry Martino

IPT, Armstrong Process CP Ti and Ti Alloy Powder and Products

2007

Computational Sciences and Engineering

Submitted by: Oak Ridge National Laboratory

Joint Submitters: NA

Developers:

ORNL: Mark T. Elmore
Brian A. Klump
Robert M. Patton
Thomas E. Potok
Joel W. Reed
Jim N. Treadwell

Piranha: A Dynamic, High-Speed, High-Volume, Knowledge Discovery Engine

2007

Engineering Science and Technology and Nuclear Science and Technology and External Institutions: Lawrence Livermore National Laboratory and Space Sciences Laboratory, University of California at Berkeley (Berkeley, CA)

Submitted by: Lawrence Livermore National Laboratory

Joint Submitters: Oak Ridge National Laboratory
Space Sciences Laboratory, University of California at Berkeley -
Berkeley, CA

Developers:

ORNL: Lorenzo Fabris (Principal Developer)
Klaus-Peter Ziock (Principal Developer)
Thomas P. Karnowski

LLNL: Jeff Collins
Dennis Carr

Space Sciences Laboratory, University of California at Berkeley: Will Marchant

Large Area Imager for Standoff Detection (LAI)

2007

Chemical Sciences and Materials Science and Technology and SuperPower, Inc. (Schenectady, NY)

Submitted by: SuperPower, Inc. - Schenectady, NY

Joint Submitter: Oak Ridge National Laboratory

Developers:

SuperPower, Inc.: Venkat Selvamanickam
X. Xiong

ORNL: M. Parans Paranthaman
Tolga Aytug (also affiliated w/ University of Tennessee, Knoxville)
Amit Goyal

High-Performance LMO-enabled, High Temperature Superconducting Wires

2007

Neutron Scattering Science; Neutron Facilities Development; and Engineering Science and Technology

Submitted by: Oak Ridge National Laboratory

Joint Submitters: NA

Developers:

ORNL: Richard Riedel
Ronald G. Cooper
Lloyd G. Clonts

TITLE: Pharos Neutron Detector System

2007

Materials Science and Technology; Fabrication and External Institutions: Duraloy Technologies, Inc. (Scottsdale, PA); Consultant; and Mittal Steel USA (Chesterton, IN)

Submitted by: Duraloy Technologies, Inc. - Scottsdale, PA

Joint Submitters: Oak Ridge National Laboratory
Anthony P. Martocci (Consultant - Bethlehem, PA)
Mittal Steel USA - Chesterton, IN

Developers:

Duraloy Technologies, Inc.: Roman I. Pankiw

ORNL: Vinod K. Sikka

Michael L. Santella
Jeffrey D. McNabb

Private Consultant: Anthony P. Martocci

Mittal Steel USA: John Mengel

Cast Nickel Aluminide for Improved Productivity of Steel Heat-Treating Furnaces

2006

Materials Science and Technology
SUBMITTED BY: C3 International, LLC

JOINT w/:

Oak Ridge National Laboratory
Hayes Lemmerz International Inc.
Surface Engineering Associates
Infrared Heating Technologies, LLC
Magna-Tech Manufacturing
Advanced Materials Associates
Vitek Performance
Pyromation, Inc.
Delaware Tool & Machinery
Heinz North America
University of Tennessee, Knoxville
North American Die Casting Association (NADCA)

Craig A. Blue, Puja B. Kadolkar, Chaitanya K. Narula, Arvid E. Pasto, Gail Mackiewicz-Ludtka, Charles R. Howell, Edward C. Hatfield, Vinod K. Sikka, Gerald E. Jellison, Thomas R. Watkins, Roberta Ann Meisner, Peter J. Blau, Harry M. Meyer III, John J. Truhan, Larry F. Allard, Gerald M. Ludtka, Wallace D. Porter, Edgar Lara-Curzio, Mark A. Deininger (C3 International), Mike Pozvonkov (C3 International), Leonid V. Budaragin (C3 International), Joe Keenan (C3 International), Dwaine Stark (C3 International), Drew Keenan (C3 International), Morgan Spears (C3 International), Paul Fisher (C3 International), Norman H. Garrett (Vitek Performance), Greg Wojcek (Hayes Lemmerz International, Inc), Bernie Jaeger (Hayes Lemmerz International, Inc), Jack Stiglich (Advanced Materials Associates), Charles T. Blue (Infrared Heating Technologies, LLC), Randall Blue (Infrared Heating Technologies, LLC), Dan Irvin (Magna-Tech Manufacturing), Stewart Irvin (Magna-Tech Manufacturing), Pete Wilson (Pyromation, Inc.), Richard F. Wilson (Pyromation, Inc.), Mark Everhart (Pyromation, Inc.), Joseph A. Downie (Surface Engineering Associates, Inc.), Phillip Roundtree (Surface Engineering Associates, Inc.), Greg Prince (Delaware Tool & Machinery), Harry Richey (Delaware Tool & Machinery), Mike Schneider (Heinz North

America), Gary M. Thomas (Heinz North America), Narendra B. Dahotre (University of Tennessee - Knoxville)

C³™ Metal Infusion Surface Treatment (MIST)

2006

Computational Sciences and Engineering

Edward A. Bright, Phillip R. Coleman, Amy L. King, Budhendra L. Bhaduri and Eddie P. Tinnel

LandScan™ 2004 Global Population Database

2006

Engineering Science and Technology

JOINT w/: Sunlight Direct, LLC; Oak Ridge TN

Jeffrey D. Muhs, David L. Beshears, Art Clemons, Dennis D. Earl, John K. Jordan, Melissa Voss Lapsa, Randall F. Lind, L. Curt Maxey, Christina D. Ward and R. Wes Wysor

Hybrid Solar Lighting Systems

2006

Materials Science and Technology; Duraloy Technologies, Inc.; and Nucor Steel

JOINT w/: Duraloy Technologies, Inc., Scottdale PA and Nucor Sheet Mill Group, Crawfordsville IN

Govindarajan Muralidharan, Vinod Kumar Sikka, Phil J. Maziasz, Neal D. Evans, Michael L. Santella, Christopher O. Stevens, Ken C. Liu (retired), Roman I. Pankiw (Duraloy Technologies Inc.) and Scott Sexton (Nucor Steel –Indiana, Sheet Mill Group)

TMA[®] 6301 and TMA[®] 4701: New Heat-Resistant Alloys

2006

Environmental Sciences, Engineering Science and Technology, Chemical Sciences, Consultant, ORISE

Tommy J. Phelps, Lonnie Love, Adam Rondinone, Robert J. Lauf (Consultant), Yul Roh (Postdoc), Chuanlun Zhang (Postdoc) and Ji-Won Moon (Postdoc)

NanoFermentation™: A Bioprocess for Manufacturing Inorganic Nanomaterials

2006

Engineering Science and Technology; Trane Company

JOINT w/: Trane Company; Lexington KY

Jim Sand (ORNL, Retired) and Art Hallstrom (Trane Company; Lexington KY)

Trane CDQ™

2005

Computational Sciences and Engineering; Computer Science and Mathematics; Life Sciences

Lee M. Hively, Vladimir A. Protopopescu, Kara L. Kruse and Nancy B. Munro

SeizAlert - A Seizure Alerting Device

2005

Engineering Science and Technology and SEMCO, Incorporated (Columbia, MO)

JOINT w/: SEMCO, Incorporated (Columbia, MO)

James R. Sand (ORNL) and John C. Fischer (SEMCO, Inc.)

SEMCO Revolution™: Integrated, Active-Desiccant Rooftop Air Conditioner

2005

Engineering Science and Technology and SensArray Corporation (Freemont, CA)

JOINT w/: SensArray Corporation (Freemont, California)

Carl W. Sohns (ORNL), Robert J. Lauf (Consultant), Don W. Bible (Retired), Wayne Renken (SensArray Corporation), Earl Jensen (SensArray Corporation), Brian Paquette (SensArray Corporation), Jeff Parker (SensArray Corporation) and Jim Barnett (SensArray Corporation)

SensArray® INtegrated Wafer

2004

Metals and Ceramics; Komtek; Queen City Forging Co.; Forging Industry Association;

Northeastern University; Infrared Heating Technologies, LLC

JOINT W/: Komtek (Worcester MA)

Queen City Forging Company (Cincinnati OH)

Forging Industry Association (Cleveland OH)

Northeastern University (Boston MA)

Infrared Heating Technologies, LLC (Oak Ridge TN)

Craig A. Blue (ORNL), Puja B. Kadolkar (ORNL), Peter G. Engleman (Doctoral Student at ORNL), Charles R. Howell (ORNL), Jackie R. Mayotte (ORNL), Vinod K. Sikka (ORNL), Evan K. Ohriner (ORNL), Robert Kervick (Komtek), Howard Mayer (Queen City Forging Company), George Mochnal (Forging Industry Association), Teiichi Ando (Northeastern University), Hui Lu (Doctoral Student at Northeastern University) and Charles T. Blue (Infrared Heating Technologies, LLC)

Advanced Heating System for High-Performance Aluminum Forgings

2004

Environmental Sciences; Chemical Sciences; The University of Tennessee - Knoxville;

Edwards AF Base

Baohua Gu, Gilbert Brown, Bruce A. Moyer, Peter V. Bonnesen, Spiro D. Alexandratos (The University of Tennessee - Knoxville) and Paul Schiff (Edwards AF Base, California)

ORNL Highly Selective, Regenerable Perchlorate Treatment System

2004

Life Sciences; University of Tennessee

JOINT W/: Naval Research Laboratory

Thomas G. Thundat (ORNL), Lal A. Pinnaduwege (ORNL), David Hedden (University of Tennessee), Tony Gehl (ORNL), Vassil Boiadjev (Post Doctoral Fellow, ORNL) and Eric Hawk (Student, ORNL)

Explosives Vapor Sensor

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

Frery is currently on leave and graduate student at M.I.T.: Michael J. Pollard and Megan

E. Frery; 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 Yifah 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 Hryncewich 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
REMENYIK 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-PRECIPIRATE-
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
IODOPHENYLMALIMIDE 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-INOUYE 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) Historical Oak Ridge Honorees

(Awards for Excellence in Technology Transfer and other honors)

02/11/2010

2009

Philip J. Maziasz, D. Ray Johnson, Alexander G. DeTrana
ORNL - Materials Science and Technology and Partnerships Directorate/Technology Transfer
"CF8C-Plus: New Cast Stainless Steel for High-Temperature Performance"
(Also won 2008 Southeast Region FLC Award and Project of the Year)

2009

William P. Partridge, Jr., John M. Storey, Sam A. Lewis, Jae-Soon Choi and Frank Damiano
ORNL - Energy and Transportation Science and Partnerships Directorate/Technology Transfer
"SpaciMS: Spatially Resolved Capillary Inlet Mass Spectrometer"
(Also won 2008 Southeast Region FLC Honorable Mention)

2009

Mark Reeves
Partnerships Directorate/Technology Transfer
"FLC Representative of the Year - 2008"

2008

Parans Paranthaman, Tolga Aytug, Amit Goyal, Mark Reeves, Venkat Selvamanickam (SuperPower, Inc.), and X. Xiong (SuperPower, Inc.)

ORNL/EXT - Chemical Sciences, Materials Science and Technology, Technology Transfer, and SuperPower, Inc.

“High-Performance LaMnO₃-Enabled, High-Temperature Superconducting Tape (LMOe-HTS)”

(NOTE: Also won 2007 Southeast Region FLC Award)

2006

Lapsa, Melissa; Beshears, David; Clemons, Art; Earl, Dennis; Jordan, John; Lind, Randall; Maxey, Curt; Muhs, Jeffrey; Ward, Christina; Wysor, Wes; Dickens, Larry; and Morris, John (Sunlight Direct)

ORNL/EXT - Engineering Science and Technology; National Security Directorate; Creative Media; Technology Transfer; Sunlight Direct, LLC

“Hybrid Solar Lighting”

(NOTE: Also won 2006 Southeast Region FLC Award)

2005

Gleason, Shaun; Paulus, Michael; Austin, Derek; Bobrek, Miljko; Alley, Gary; Tobin, Kenneth; McKinney, Chris and Licata, Michael (Philips)

ORNL/EXT - Engineering Science and Technology; Technology Commercialization; Philips Medical Systems

“MicroCAT (trademark): X-ray Micro-Computed Tomography for Biological Research”

(NOTE: Also won 2004 Southeast Region FLC Project of the Year Award)

2005

Greenbaum, Elias; Rodriguez, Miguel; Sanders, Charlene; Hill, David; Harrell, John; Reeves, Mark; Stouder, Richard; and McCarter, Steven

ORNL/EXT - Chemical Sciences; Life Sciences; Metals and Ceramics; Craft Resources; Technology Commercialization; Department of Defense Programs; United Defense, LP

“AquaSentinel Real-Time Water Supply Protection Monitor”

(NOTE: Also won 2004 Southeast Region FLC Award)

2005

Martin, Rodger; Gross, Ian; Pierce, Larry; Miller, Russ; Reeves, Mark; and Sandler, Manfred

ORNL/EXT - Metals and Ceramics; Nuclear Science and Technology; Craft Resources; Technology Commercialization; and Isotron

“Miniature Californium-252 Neutron Source for Cancer Therapys”

(NOTE: Also won 2004 Southeast Region FLC Honorable Mention Award)

2005

Thundat, Thomas; Brown, Gilbert; Ferrell, Thomas; Warmack, Robert; Miller, Russ; Witkowski, Charles; Harkins, Jay; Hafeman, Dean; and Dill, Kilin

ORNL/EXT - Life Sciences; Chemical Sciences; Engineering Science and Technology; Technology Commercialization; Protein Discovery, Inc.

“Photo-Molecular Comb(trademark) Biomolecular Separator”

(NOTE: Also won 2004 Southeast Region FLC Award)

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)

2004

Larry Dickens

Technology Transfer and Economic Development

“FLC Representative of the Year”

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

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

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”

1991

George E. Courville
ORNL - Energy Division

“For establishment of the Roof Research Center, which has played a key role in promoting energy efficiency in the U.S. construction business”

1991

James O. Stiegler

ORNL - Metals and Ceramics Division

“For being the determining factor in the transfer of technologies from the Metals and Ceramics Division at ORNL to the private sector”

1990

Victor J. Tennery

ORNL - Metals and Ceramics Division

“For major contributions to industry by conceptualizing, starting, and managing the High Temperature Materials Laboratory User Program”

1989

James R. Weir, Jr.

ORNL - Metals and Ceramics Division

“For significant contributions to the development of technologies from interesting science resulting in five-nickel aluminide licenses and the development of marketplace interest in other technologies nationally and internationally”

1988

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 and a companion cooperative agreement (REMOTEC/DOE) leading to commercialization of Advanced ServoManipulator/Control System technology”

1987

Terry N. Tiegs and Paul F. Becher

ORNL - Metals and Ceramics Division

“For transferring technology related to silicon carbide whisker-alumina composites used in high strength/toughness applications by industrial manufacturers of cutting tools”

1987

Karl W. Haff, J. Andrew Tompkins, Dan W. Ramey, and Eugene Newman

ORNL - Operations Division

“For the Radioluminescent Light Development (RL) Program - developing and transferring to the public and government sectors of cost-and energy-efficient radioluminescent lights for airfield lighting systems”

1986

Tuan Vo-Dinh, Michael S. Blair, and E. Jonathan Soderstrom

ORNL - Health and Safety Research Division

“For noteworthy contributions toward the commercialization of the Fiberoptics Luminoscope, resulting in a licensing agreement with Environmental Systems Corporation of Knoxville, Tennessee”

1986

Vinod K. Sikka, Chain T. Liu, Anthony C. Schaffhauser, and E. Jonathan Soderstrom

ORNL - Metals and Ceramics Division

“For noteworthy contributions toward the commercialization of nickel-iron aluminide alloys and, specifically, toward the achievement of a licensing agreement with Cummins Engine Company, Inc.”

DISCOVER AWARDS ORNL, HISTORICAL WINNERS

06/06/2001

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)