

CRADA No.	Company	Technology
ORNL90-0001	United Technologies Optical Systems, Inc.	Mirror and Component Fabrication (MODIL)
ORNL90-0001a	United Technologies Optical Systems, Inc.	Mirror and Component Fabrication (MODIL)
ORNL90-0001b	Lockheed Martin Electronic, Information, and Missiles (TERMINATED)	Mirror and Component Fabrication (MODIL)
ORNL90-0001c	Contour Fine Tooling, Inc. (COMPLETED)	Mirror and Component Fabrication (MODIL)
ORNL90-0002	EPRI; NIST; Ontario Hydro; Canadian Electrical Assoc.	S2F10 Production, Detection & Mitigation
ORNL90-0003	Exergy, Inc. (TERMINATED 8/5/93)	Test NH ₃ /H ₂ O Mixtures
ORNL90-0027	Eaton Corp. & Johnson Controls, Inc. (TERMINATED)	SMA Material
ORNL90-0028	The Society of the Plastics Industry; PIMA	Viability of Alternative HCFC Blowing Agents
ORNL90-0029	Cellulose Industry Standards Enforcement Program (CISEP)	Thermal Performance of Cellulose Insulation
ORNL90-0030	SPA-AFEAS (Alternative Fluorocarbon Environmental Acceptance)	Global Assessment of CFCs
Y-1290-0031	State of Tennessee	Regional Manufacturing Technology Initiative
ORNL90-0034	Pellissippi International	Optical Detection of Charged Particle Tracks
ORNL90-0035	AlliedSignal, Inc. (Garrett Ceramic Components Division)(Co)	Microwave Annealing of SiN With High Additive Content
ORNL90-0036	Norton Co.	Microwave Sintered Reaction Bonded SiN
ORNL90-0037	Norton Co. (COMPLETED)	Microwave Annealing of SiN With Low Additive Content
ORNL90-0038	Eveready Battery, Inc.	Packaging for Thin Film Lithium Microbatteries
ORNL90-0039	General Electric Corporation	Biodegradation of PCBs
ORNL91-0040	Appliance Research Consortium, Inc.	Refrigeration Efficiency
ORNL91-0041	Foamseal, Inc. (COMPLETED)	Thermal Efficiency of Ceiling Panels
ORNL91-0042	Appliance Research Consortium, Inc.	Powder Evacuated Panel
ORNL91-0046a	Intel Supercomputer Systems Div.	Evaluation of Prototype Systems
ORNL91-0046b	International Business Machines	Advanced Computing Architectures
Y-1291-0049	State of Tennessee (Terminated 10/1/93)	Environmentally Compliant Manufacturing Technology
Y-1291-0049a	CAE Vanguard, Inc.	Nickel Plating Development Project
Y-1291-0051	Coors	Non-destructive Testing of Ceramic Components
Y-1291-0052	United Technologies, Pratt & Whitney Division	Advanced Machining Applications of Optical Inspection
ORNL91-0053	EPRI	Integrated I&C Development Plan
ORNL91-0054	Gamma-Metrics	SERS Monitor
ORNL91-0055	Microwave Labs (Completed)	Wideband Microwave Processing Equipment
ORNL91-0056	AVX Tantalum Corp.	Microwave Sintering Tantalum Capacitors
ORNL91-0060	EPRI	Advanced Deposition & Substrate Technologies for Thin-Film Polycrystalline Silicon
ORNL91-0061	3M (Minnesota Mining & Mfg. Company)(COMPLETED)	Chemical Vapor Infiltration of Ceramic Composites
ORNL91-0063	Vitro Corp.	Application GIS to Environmental Site Characterization

K-2591-0064	Fidelity Chemical Products Corp.	Electroless Nickel Bath Recycle System
ORNL91-0066	Babcock & Wilcox (COMPLETED)	Characterization of Char Combustion Kinetics in Atmospheric and Pressurized Fluidized Beds
Y-1291-0067	FMC Corporation	Remote Lithium Extraction Process
K-2591-0068	Fanamation Corp., Sub of Indivers (Terminated)	Manufacturing Technology - Enhanced Inspection Techniques for Automated CMM
ORNL91-0069	BellSouth, IBM, UT	Testing of High Speed Network Components
K-2591-0070	S. D. Myers Corp. (TERMINATED)	Chemical Destruction of PCBs
ORNL91-0071	PPG Industries, Inc.	Dev. of Optimum Powders for Powder Evacuated Panel Insulation
ORNL91-0072	National Fuel Gas Distribution Corp.	Modification of the ORNL Energy Audit for Northern Application
ORNL92-0074	EPRI	Power Application of High Temperature Superconductivity: Variable Speed Motors and Thin-Film Current Switches
ORNL91-0075	Ogden Environmental and Energy Services, Inc.	Development and Demonstration of Biosorbents for Clean Up of Uranium in Water
ORNL92-0076	General Motors Corp., Saginaw Division	Development of Heat-Resistant Assemblies for Heat-Treating Furnaces
DOE-92-0077	National Center for Manufacturing Sciences	Advanced Manufacturing Sciences
PES001-0077	National Center for Manufacturing Sciences (NCMS)	Rapid Response Manufacturing
PES002-0077	National Center for Manufacturing Sciences (NCMS)	Predictive Model and Methodology for Heat Treatment Distortion
PES003-0077	NCMS	Advanced Physical Models and Monitoring Methods
PES004-0077	NCMS	Rapid Response Manufacturing
Y-1292-0078	Coors Technical Ceramics Co.	Dev. of Precision Machining & Inspection Technology for Structural Ceramics
Y-1292-0079	Blasch Precision Ceramics, Inc. & Surface Engineering Co.	Development of a Metal-Ceramic Composite Crucible
ORNL92-0082	Lockheed Missiles/OCA Applied Optics (TERMINATED)	Optics Manufacturing Operations Development and Integration Laboratory (Modil)
ORNL92-0082a	ST&F Precision Technologies	High Accuracy Natural Diamond Tooling Evaluation
ORNL92-0082b	Aerojet (TERMINATED)	Self-Aligned Lightweight System for Space Qualified Application
ORNL92-0083	Spray Drift Task Force	A New Method for Measuring the Dynamic Surface Tension of Complex-Mixture Liquid Drops
ORNL92-0085	Manville Sales Corporation	Evaluate the Thermal Performance of Insulation in a Conventional Attic
Y-1292-0086	Vacuum Technology, Inc.	Develop a Self-Calibrating Mass Spectrometer
Y-1292-0088	Detroit Diesel Corp.	Cost Effective Machining and Inspection of Structural Ceramics

ORNL92-0090	Brown & Sharp Mfg. Co.	Coordinate Measurement Standardization Studies for High Precision Ceramic and Metal Components
ORNL92-0091	Commercial Crystal Laboratories	Investigate Growth of Large MgO Single Crystals
Y-1292-0092	Lanxide Corp. (Terminated 2/26/95)	Cost Effective Machining and Inspection of Structural Ceramics
ORNL92-0093	Envirogen, Inc.	Evaluate Effectiveness of Bench-Scale Vapor-Phase Bioreactor for Removal of Trichloroethylene from a Complex Aqueous Waste Stream
ORNL92-0094	Mechanical Technology, Inc. (MTI)	Design and Fabrication of a Prototype Sensor System for Waste Storage Tank Characterization
Y-1292-0095	Moore Tool Co.	Optimization of Jig Grinding Operations
ORNL92-0097	Modell Development Corp.	Behavior of Aqueous Electrolytes in Supercritical Water Oxidation(SCWO) Processes
ORNL92-0099	Metallamics, Inc.	Development of Ni3Al Alloys for Use as Transfer Rolls in the Hot Processing of Steel
C93-01201	Clean Air Engineering (CAE) and University of Chicago	Continuous Emissions Monitor for Incinerators
Y-1292-0102	General Motors Corp.	Hydroforming Design and Process Advisor (HDPA)
ORNL92-0103	Coors Technical Ceramics (Terminated)	Development of Gel Casting for Industrial Applications
ORNL92-0104	International Business Machines	Develop Advanced Metallization Technology for Processing Integrated Circuits with Submicron Features
ORNL92-0106	Rohm & Haas	Use of Electric Fields to Enhance Industrial Chemical Processing
ORNL92-0108	E. I. du Pont de Nemours & Company	Heat Pump System Modeling of HCFC-22 Alternatives
Y-1292-0110	General Motors Corp., Delco Remy Div.	Parametric Electric Motor Study
Y-1292-0111	General Motors, Allison Div. (Terminated 6/93)	Power Generation for NOX Reduction
Y-1292-0112	General Motors, AC Rochester Div.	NOx - Sensors and Systems for Engine Management
ORNL92-0113	General Motors Research	Lightweight Materials for Automotive Applications
ORNL92-0115	General Motors, AC Rochester Div.	Improved Catalyst Materials and Emission Control Systems
ORNL92-0116	Marlow Industries, Inc.	High-Performance Thermoelectric Materials
ORNL92-0117	Concurrent Technologies Corp.	Development of a Comprehensive Weld Process Model
ORNL92-0118	Hoechst Celanese, Inc.	Atomistic Simulation of Materials: A Neural Network Approach
ORNL92-0123	E. I. du Pont de Nemours & Company/VacuPanel, Inc.	Develop Low Permeability Cladding Material for PEP Insulation
ORNL92-0124	International Business Machines	Testing of High Speed Network Components
ORNL92-0125	Dow Chemical Company	Microwave Processing of Silicon Carbide
ORNL92-0127	Babcock & Wilcox	Application of Chaotic Time Series Analysis for the Characterization and Control of Fluidization and Combustion Systems

ORNL92-0128	Pratt & Whitney	Performance Improvement for Ceramic Bearings
Y-1292-0130	Fisons Instruments, Inc.	Dev. of XRMF Techniques for Measurement of Multi-Layer Film Thicknesses on Semiconductors for VLSI and ULSI Integrated Circuits
Y-1292-0131	Chemchek Instruments, Inc.	Development of Instrumentation for Trace Uranium
ORNL92-0133	Landauer, Inc.	Track-Etch Detectors for Monitoring Alpha Surface Contaminants
ORNL92-0134	Rad. Elec., Inc.	Electrets for Quick Screening for Surface Alpha Contamination
ORNL92-0135	AlliedSignal, Inc. (Garrett Ceramic Components Division) Ter	Microwave Processing of Reaction-Bonded Silicon Nitride-Carbon Fiber Composites
Y-1292-0136	Cincinnati Millicron Marketing Co.	Machining Tool Evaluation and Machining Operations Development
ORNL92-0138	Procter & Gamble Company	Characterization of Proliferating Epithelial Cells in the Liver of the Transgenic Insertional Mutation Tg737
ORNL92-0139	International Road Dynamics, Inc.	Development of Fiber Optic Vehicle Weigh-In-Motion (WIM) and Axle Sensing Technology
ORNL92-0140	KLA Instrument Corporation	Characterization of Proliferating Epithelial Cells in the Liver of the Transgenic Insertional Mutation Tg737
ORNL92-0143	ABB Combustion Engineering	Development of Corrosion-Resistant Surface Protection for Fossil Power Systems
ORNL92-0146	ABB Combustion Engineering	Advanced Austenitic Alloys for Fossil Power Systems
ORNL92-0147	CIMA/TTU	Physical Properties Database for Insulation
ORNL92-0149	Dow	Evaluation of Friction and Wear Response of In-Situ Toughened Silicon Nitride
ORNL92-0150	Allied Signal, Inc.	Sliding Wear Response of In-Situ Reinforced Silicon Nitride
Y-1292-0151	Caterpillar/Diacraft/S. E. Hoffman	Cost-Effective Machining and Inspection of Structural Ceramic Components for Advanced Heat Engines
ORNL92-0152	Spar Aerospace Ltd.	Flexible Manipulator Controller Development
Y-1292-0155	OptoDyne, Inc.	Upgrade the Hardware and Measurement Technology of the Supermicrometer
Y-1292-0156	General Motors (AC Rochester)	Engine System Electronics (ESE) for High Temperature and High Voltage
ORNL92-0161	E. I. du Pont de Nemours & Co.	Air Conditioner Air-Refrigerant Cross-Flow Heat Exchangers with R-22 and 32/R-134a ZERM
Y-1293-0162	Silma Inc.	CimStation/IM Enhanced Data Verification
Y-1293-0163	Tennessee Tech Foundation	Economic Development Technological Support
K-2593-0165	Cabletron Systems	Advanced Networking

Y-1293-0166	General Motors - AC Rochester	Reduction of Nitrogen Oxide Emissions for Fuel Burn Technology
Y-1293-0168	State of Florida	Regional Manufacturing Technology Development for the Small Manufacturer
ORNL93-0172	Cummins Engine Co.	Direct-Energy-Regenerated Particulate Trap Technology
ORNL93-0173	Dow Corning Co.	Energy Efficient Existing Low-Slope Roof Re-Cover
Y-1293-0174	Citibank, Inc.	Advanced Software Algorithms
Y-1293-0175	International Business Machines; Almaden Research Center	Numerical Modeling of Giant Magnetoresistance Effect for Application to Magnetic Data Storage
Y-1293-0176	Pratt and Whitney	Development of Isotropic, Micro-Toughened Titanium-Base Intermetallics for High-Temperature Service
Y-1293-0178	Westinghouse Electric Corporation	Welding and Weldability of Directionally Solidified Single Crystal Nickel-Base Superalloys
ORNL93-0180	Oxford Superconducting Technologies	Development of High Temperature Superconducting Wire
ORNL93-0182	Dow Chemical Co.	Advanced Bioreactor Systems for the Conversion of Chlorinated Byproducts to Industrial Chemicals
K-2592-0184	National Institute for Environmental Renewal (formerly Lacka	Environmental Recycle, Reuse and Reclamation of Industrial Sites
Y-1293-0185	W. R. Grace & Co. (Ferro Corp.)	Process Modeling and Machining Operations Development
ORNL93-0187	Ohio Brass Co.	High-Power Surge Arrester Material
ORNL93-0190	Monolith Technology, Inc.	Heat Transfer Polymer Enhanced Microwave Process for Stabilization of Liquid Radwaste Slurry
ORNL93-0191	Clayton Homes/Tennessee Technological University	Evaluation of Superinsulations to Improve the Energy Efficiency of Manufactured Homes
ORNL93-0192	Aladdin Industries, Inc.	Development of Metal-Clad Filled Evacuated Panel Superinsulation
Y-1293-0193	General Motors, Delphi Energy & Engine Management System	Hard-Surfaced Polymeric Materials by Ion Beam Processing
ORNL93-0195	Scientific Atlanta, Inc.	Modification and Validation of an Automotive Data Processing Unit, Compressed Video System, and Communications Equipment
ORNL93-0196	Phase Change Technologies, Inc.	Thermal Benefits of Perlite/Phase Change Material Insulation in a Simulated Climate
ORNL93-0197	Textile/Clothing Technology Corporation (AMTEX)	Demand Activated Manufacturing Architecture Project
Y-1293-0199	Vamistor Corp.	Improved Resistor Metalization Processes
Y-1293-0200	ASTeX Applied Science and Technology, Inc.	Development of a Cooled Microwave Window

ORNL93-0201	Energy Conservation Devices, Inc.	Plasma Analysis and Diagnostics for High Efficiency Amorphous Solar Cell Production
ORNL93-0202	Rapid Technologies, Inc.	Use of Ni3Al-Based Alloys for Walking-Beam Furnaces
Y-1293-0203	International Business Machines	Development of High-Performance Storage Systems (HPSS)
Y-1293-0204	Linear Motion Industries, Inc./Jergens, Inc.	Selection of Joining Techniques for Shape Memory Wires
Y-1293-0205	Coors Ceramics Co.	Machine Vision Inspection of Holes
Y-1293-0207	DSP Control Group, Inc.	Advanced Machine Tool Accuracy Compensation
ORNL93-0208	Engineering Resources, Inc.	Conversion of Synthesis Gas to Liquid Fuels and Removal of SOx and NOx from Coal Combustion Gases
Y-1293-0209	Hal-Bilt Homes, Inc.	Superinsulation in Walls of Factor-Built Homes
Y-1293-0210	Chand Kare Technical Ceramics	Internally Cooled Diamond Wheel for Ceramic Machining
Y-1293-0211	Ceramic Magnetics	Gelcasting of Soft Ferrite Parts
Y-1293-0212	Fidelity Chemical Products, Inc./Komag Inc.	Enviro-CP
Y-1293-0213	Devasco International	Development of Filler Metals for Welding of Iron Aluminide Alloys
Y-1293-0215	M&M Mars Inc.	Analysis of Production Line Motor Failure
ORNL93-0218	Defraction International	Diffraction Null Compensators for Aspheric Testing
Y-1293-0220	PhD Research Group	Development of a Cooled Microwave Window
Y-1293-0221	Bienne Technology, Inc.	Micro-Minature Mass Spectrometer
Y-1293-0222	Lotec	Ceramic Welding
Y-1293-0223	UTE	Development of Straightness Measuring Equipment
Y-1293-0224	Tetra	Laser Ball Bar Development
ORNL93-0226	Remotec	Enhanced Control & Sensing for the Remotec Andros Mk VI Robot
ORNL93-0227	Corning, Inc.	Formation of Novel Optical Materials by Ion Implantation
ORNL93-0228	MER	Gas Pressure Sintering of Silicon Nitride
ORNL93-0229	SCSC	Design and Testing of a Continuous Metal Biosorption System
Y-1293-0230	State of Georgia	Regional Manufacturing Technology Development for the Small Manufacturer
Y-1293-0231	State of North Carolina	Regional Manufacturer Technology Development for the Small Manufacturer
ORNL93-0232	Environmental Research Consortium (USCAR)	Exhaust Gas-Flow Measurement System
Y-1293-0233	AECL; Applied Poleramic; Boeing; Ciba-Geigy; E-Beam; IRT	Electron Beam Curing of Polymer Matrix Composites
ORNL93-0234	Enermodal Engineering Limited	Thermal Performance Testing of Steel Frame and Masonry Wall Assemblies

ORNL93-0235	National Association of Home Builders	Testing for Thermal Performance of U-Value of Steel Frame Construction
ORNL93-0236	Boise Cascade	Biochemical Basis of Drought Tolerance in Hybrid Populus Grown Under Field Production Conditions
ORNL93-0237	Automotive Materials Partnership (USCAR)	Adhesives Bonding Technologies for Automotive Structural Components
ORNL93-0238	Environmental Research Consortium (USCAR)	Advanced Quadrupole Ion Trap Instrumentation for Low Level Vehicle Emissions Measurements
Y-1293-0241	STI Manufacturing Group (COMPLETED)	Implementation of Computerized Shop Floor Control System
ORNL93-0242	Dow Corning Corp.	The Mechanics of Creep Deformation in Polymer Derived Continuous Fiber Reinforced Ceramic Matrix Composites
ORNL93-0243	Golden Technologies, Inc.	Gelcasting of Aluminum Titanate
ORNL93-0244	Golden Technologies, Inc.	Scale-Up of Microwave Nitridation of Sintered Reaction-Bonded Silicon Nitride Cam Roller Follower Parts
Y-1293-0245	Quick-Rotan, Inc.	High-Efficiency Sewing Machine Motor
Y-1293-0246	Knight's Armament Company	Advanced Materials and Coatings for Firearms and Firearm Suppressors
Y-1294-0247	Cincinnati Milicron	Development of Artificial Intelligence System for Manufacturing Cell Configuration
K-2594-0249	University of North Carolina	Real-Time Air Monitoring Using Open-Path FTIR
ORNL94-0250	Saint Gobain/Norton Industrial Ceramics Corp.	Gelcasting of CRYSTAR Silicon Carbide Ceramics
Y-1294-0251	Ceradyne, Inc.	Ceramic Component Manufacturing Process Development
ORNL94-0252A	Texaco	Removal of Heteroatoms and Metals from Crude Oils by Bioconversion Processes
ORNL94-0252B	Energy BioSystems Corp.	Removal of Sulfur from Crude Oils by Bioconversion Processes
ORNL94-0252C	Exxon Research & Engineering	Removal of Sulfur from Crude Oils by Bioconversion Processes
ORNL94-0252D	Baker Performance Chemicals	Removal of Sulfur from Crude Oils by Bioconversion Processes
ORNL94-0252E	Chevron Research & Technology	Removal of Sulfur from Crude Oils by Bioconversion Processes
ORNL94-0252F	Union Oil Company	Removal of Heteroatoms and Metals from Crude Oils by Bioconversion Processes
ORNL94-0253	Institute of Textile Technology (ITT) (AMTEX)	The AMTEX Computer Aided Fabric Evaluation (CAFE) Project

Y-1294-0254	Delta Defense, Inc.	Application of Powder Metallurgy Techniques for the Development of Nontoxic Ammunition
ORNL94-0256	Institute of Textile Technology (ITT) (AMTEX)	Low Waste Electro spray Method for Applying Chemicals and Finishing Agents to Textiles
ORNL94-0257	Advanced Ceramics Research Corp.	Rapid Prototyping Using Injection Stereolithography of Gelcasting Slurries
ORNL94-0258	Morris Bean & Co.	The Prediction of Microporosity in Shrouded Impeller Castings
ORNL94-0259	Lockheed Martin Electronics & Missiles	Investigation of Heterodyne Performance of Quantum-Well Detectors
ORNL94-0260	Cummins Engine Co.	Emissions Reduction for Internal Combustion Engines Using Nonlinear Dynamic Analysis
ORNL94-0263	Merritt Systems	Proximity Sensor System Development
ORNL94-0264	Teledyne Microelectronics, Inc.	Development of a Thin Film Battery Powered Transdermal Medical Device
ORNL94-0265	Applied Science and Technology	Development of a Soft Plasma Cleaning Technology for Semiconductor Processing
ORNL94-0266	Golden Technologies, Inc.	Design Development and Fabrication of an Inorganic Membrane to Separate Hydrogen from Petroleum Refinery Purge Gases
ORNL94-0269	Dow Corning	Electric Field Enhanced Separation of Microdroplets and Ultrafine Solid Particulates from Various Fluids
ORNL94-0270	AT&T Bell Laboratories	Ion Implantation Processing Technologies for Telecommunications Electronics
ORNL94-0271	Low Emissions Technologies Research & Development Part	Cylinder Design for Reduced Emissions Origins
ORNL94-0272	Textile/Clothing Technology Corp. (AMTEX)	Rapid Cutting Project
Y-1294-0273	General Electric Company, Inc.	Moldable Transient Suppression Polymer Composite
ORNL94-0274	Deltronic Crystal Industries, Inc.	Growth of Large Detector Crystals
ORNL94-0277	Materials and Electrochemical Research Corp.	Analysis of Hydrogen Storage in Fullerenes
ORNL94-0278	Teledyne Wah Chang Albany	Development of a High Temperature Shape Memory Alloy
ORNL94-0279	Magnequench International (formerly General Motors Corp.,	Alloy Desig of Nd ₂ Fe ₁₄ B
Y-1294-0280	Certified Industries Corporation	Powdered Metal Inserts
Y-1294-0281	Forged Performance Products	Characterization of Powder Metal Parts and Applied Surface Coatings Following Pneumatic Isostatic Forging
Y-1294-0282	Worth, Inc.	Alternative Core Material for Softballs
Y-1294-0283	X-Ray Optical Systems, Inc.	Development of Improved X-ray Optics for Analytical X-Ray Microbeams

Y-1294-0284	Metallamics, Inc.	Hardfacing of Alum. Alloys & Alum. Based Metal Matrix Composites w/ Intermetallic Alloys by the Use of Adv. Thermal Spray Coating
ORNL94-0285	Research International	Development of a Thin-Film Battery Powered Hazard Card
ORNL94-0286	Ford Motor Company	Improved Understanding of the Frictional Behavior of Automotive Brake Materials
ORNL94-0287	Westinghouse	Advanced Ceramics for Land-Based Gas Turbine Vane Applications
ORNL94-0288	Metters Industries, Inc.	Composite Material Fabrication Techniques
ORNL94-0289	Stephens Engineering Co., Inc.	Optimal Access to Large Databases via Networks
ORNL94-0290	Tresp Associates, Inc.	Automated Tools for Cross-referencing Large Databases
Y-1294-0291	TEXCOM, Inc.	Development of a Geographic Visualization & Communications Systems for Transportation Networks
Y-1294-0292 (94ML)	Low Emissions Technologies Research & Development Part	Advanced Manufacturing
Y-1294-0293 (94ML)	Low Emissions Technologies Research & Development Part	Superplastic Forming
Y-1294-0294	State of Tennessee	Manufacturing Assistance for Tennessee Manufacturers
Y-1294-0296	Environmental Systems Corp.	Optical Particular Emission Monitor
Y-1294-0298	Specialty Industrial Products/Sun River Innovations	Enhanced Biodegradation of Surfactants in Industrial Wastewaters
ORNL94-0301	Delta M Corporation	Improved Mineral Insulated Cables for Fusion Reactor Diagnostics
Y-1294-0302	Cincinnati Millicron/Cummins Engine Co.	Machining and Inspection of Precision Ceramic Engine Components
ORNL94-0305	Rho Med, Inc.	Rhenium Radiolabeled Antibodies and Peptides for Cancer Therapy
Y-1294-0306	Computer Application Systems, Inc.	Simulation of 3-D Electromagnetic Fields Near Capacitance Sensors
Y-1294-0307	Apeiron	Advanced Compact Laser Scanning System Enhancements for Gear and Thread Measurements
ORNL94-0308	Gel Tech, Inc.	Diamond-Turned Master Molds for Bulk Casting of Sol-Gel Silica Diffractive Optical Elements
ORNL94-0309	GeTech, Inc. (Resubmitted)	Novel Cost-Effective Process for the Replication of Hybrid Diffractive/Refractive Optical Elements in Silica Glass
ORNL94-0312	Supercond Technology, Inc.	Smart Structures Using Silicone Rubber Fiber Optics
ORNL94-0313	Metal Matrix Composite Castings, Inc.	Fabrication of Cast Metal Matrix Components
ORNL94-0314	Hoskins Manufacturing Co.	Development of Commercial Applications of FAPY Alloy

ORNL94-0315	Cummins Engine Co.	Study of Bonding Interfaces between Reinforcing Materials and Cast Aluminum Alloys
ORNL94-0316	International Sensor Technology, Inc.	Dev. of Protocols using Thermoluminescent Detector Arrays for Two-Dimensional Mapping of Alpha Activity on Surfaces and in Soils
ORNL94-0317	Fiber Materials, Inc.	Carbon-Carbon Composite Orthopedic Prosthesis and Implants
ORNL94-0318	USCAR (AMP)	Rapid Tooling for Functional Prototyping of Metal Mold Processes
ORNL94-0319	USCAR (AMP)	Design and Product Optimization for Cast Light Metals
ORNL94-0320	InterScience, Inc.	Ultraprecision Automated Measurement for Manufacturing
ORNL94-0321	Engelhard Corp./ICC	Moving Advanced Desiccant Materials into Mainstream Non-CFC Cooling Products
ORNL94-0322	Hughes Christensen/Houston Advanced Research Center	Implantable Drill Bit Monitor for Use in Oilfield Drill Bits
ORNL94-0323	Remtech	Efficient On-Site Degradation of High Concentrations of Spent Deicing Fluids
ORNL94-0324	Marlow Industries, Inc.	New Thermoelectric Materials for Solid-State Refrigeration
ORNL94-0325	Pratt & Whitney	The Role of Yttrium in Improving the Oxidation Resistance in Advanced Single Crystal Nickel-Based Superalloys for Turbine Appli.
ORNL94-0326	Nartron, Adv. Vehicle Systems, Chattanooga Area Reg. Tran	Air Conditioning System with Improved Efficiency for Hybrid-Electric Vehicles
ORNL95-0327	Teledyne Alvac	Manufacturing of Nickel-Base Superalloys with Improved High-Temperature Performance
ORNL95-0328	Darwin Molecular Corporation	Identification of Genes Affecting the Immune System Using Chromosomal Rearrangements in Mice: A Collaborative, Genetic Approach
ORNL95-0329	Southern Technology Council	Establishing the Southeastern Regional Alliance Program in Development of Technology Commercialization
ORNL95-0330	Wolverine Tube Co.	Heat Transfer Surface Augmentation for Zeotropic Mixture Alternatives to HCFC Refrigerants
ORNL95-0331	Occidental Chemical Corp.	Rutherford Backscattering Analysis of the Failure of Chlorine Anodes
K-2595-0332	Golden Technologies	Design, Development, and Fabrication of Enhanced Inorganic Membranes in Systems to Remediate the Problem of VOC's in Water
K-2595-0333	Golden Technologies	Inorganic Membrane for Hydrogen Separation in Olefin Production

ORNL95-0334	USCAR (LEP)	Powertrain Sensors and Actuators: Materials, Design, Process Modeling
ORNL95-0335	Advanced Ceramics Research	Rapid Prototyping of Bioceramics for Implants
ORNL95-0337	Ford Motor Company	Engine Control Improvement Through Application of Chaotic Time Series Analysis
ORNL95-0338	Nomadic Technologies, Inc.	Improved Design of the Omnidirectional Robotic Platform for Enhancement of Manufacturability and Commercialability
ORNL95-0339	Tennessee Resource Valley	Development of a Technology Strategy for the State of Tennessee
Y-1295-0340	Rustec, Inc.	Advanced Recycling of Co-Mingled Metals
Y-1295-0341	Safari Land, Inc.	Development of a Cooling System for Body Armor Applications
Y-1295-0342	Cincinnati Milacron/Cummins Engine	Developing Fabrication Methods for Piston Rings
ORNL95-0344	Reynolds Metals Co.	Development of Aluminum Bridge Deck System
ORNL95-0349	PerSeptive Biosystems, Inc.	Laser Desorption Time-of-Flight Mass Spectrometer DNA Analyzer
ORNL95-0351	Hyper-Therm High-Temperature Composites, Inc.	Optimization of Porous-SiC Fiber Coatings
ORNL95-0352	Textile Research Institute (AMTEX)	The On-Line Process Control Project
ORNL95-0353	Physio-Control Corporation	Heart Pathology Determination from Electrocardiogram Signals by Application of Deterministic Chaos Mathematics
Y-1295-0354	LaSen, Inc.	Production and Testing of Laser Crystals
Y-1295-0355	American Cyanamid Company, Inc.	Biologically Derived Toxin to Cockroaches
Y-1295-0356	Commonwealth Enterprises, Inc.	In-Situ Soil and Water Remediation at Contaminated Sites Utilizing a New Form of Humic Matter Called "Humosorb"
Y-1295-0357	Cincinnati Milacron, Inc./Eaton Corp.	TEAM High Throughput and Reliability Project
ORNL95-0358	Doehler-Jarvis Corporation	Manufacture of Die-Casting Dies by Hot Isostatic Pressing
ORNL95-0359	Lambda	Microwave Processing Technology Development
ORNL95-0360	The Aluminum Association, Inc.	Evaluation/Prevention of Molten Aluminum-Water Steam Explosions in Casting Pits
ORNL95-0361	Moltech Corporation	Application of Ceramic Electrolyte Thin Films in Lithium Polymer Batteries
ORNL95-0362	Alumax Technology Corp., Kaiser Aluminum & Chemical Cor	In-line Sensors for Electrolytic Aluminum Cells
ORNL95-0363	Thompson Aluminum Casting	Metal Compression Forming of Aluminum Alloys and Metal Matrix Composites
ORNL95-0364	International Road Dynamics, Inc.	Advanced Weigh-In-Motion System for Weighing Vehicles at High Speeds

Y-1295-0366	Kras World Wide, Inc.	Semiconductor Assembly Technology Development
ORNL95-0367	RIS Corp.	Monolithic Circuits for Barium Fluoride Detectors Used in Nuclear Physics Experiments
ORNL95-0368	Aerometrics, Inc.	Development and Evaluation of a Lateral Position Lane Tracking System
ORNL95-0369	Cryo Dynamics, Inc.	Energy Efficient and Environmentally Friendly Surface Cleaning System Using Solid CO2
Y-1295-0370	Arde, Inc.	Composite Over-Wrapped Toroidal Pressure Vessel
ORNL95-0371	Osram Sylvania	Electroluminescent Material for Flat Panel Display
ORNL95-0372	Thoughtventions Unlimited	Low Loss Sapphire Windows or High Power Microwave Transmission
Y-1295-0373	Environmental Testing Systems	Delivery Mechanism for Environmental Testing System
Y-1295-0374	Mine Safety Appliance Company, Inc.	Evaluation of Advanced Gas Chromatographs for On-Site Analysis
ORNL95-0375	Weyerhaeuser Paper Company	Improved Materials for Use as Components in Kraft Black Liquor Recovery Boilers
Y-1295-0376	SoilTech Environmental Systems, Inc.	Adaptation of Soilwashing to Radionuclide and Heavy Metal Removal
ORNL95-0377	AlliedSignal, Inc.	Carbon-Carbon Composite Manufacturing
Y-1295-0378	USCAR/INEL	Intelligent Welding of Thin Metal Sections
Y-1295-0379	Surface Engineering	Refractory Metal Carbide and Nitride Composite Materials
ORNL95-0381	Southwire Co.	Development of Superconducting Transmission Cable
Y-1295-0382	Masco Machine, Inc.	Structural Analysis of the Bridge of the New Generation MASCO 3 Axis CNC VTL/VMC Combination Machining Center
Y-1295-0384	C4 Technologies, Inc.	Coated Cutting Tool Insert Development
Y-1295-0385	Surface Optics Corp.	Surface Inspection Machine - Infrared (SIMIR)
ORNL95-0386	Teledyne Electronic Technologies	Field Deployable Continuous Monitoring Ion Trap Mass Spectrometer
ORNL95-0388	ConnectWare, Inc.	Asynchronous Transfer Mode (ATM) Adapter Device Driver for Digital Unix
ORNL95-0389	Osram Sylvania, Inc.	Gelcasting Polycrystalline Alumina
ORNL95-0391	E.I. DuPont De Nemours and Company	Evaluation of Air Conditioner Air Refrigerant Cross-Flow Heat Exchangers with R22 and Zeotropic Refrigerant Mixture
Y-1295-0392	GeoPhex, Ltd.	Geophysical Tomographic Imaging System
Y-1295-0394	Vacuum Technology, Inc.	Rapid Scanning Mass Spectrometer
ORNL95-0395	Coca Cola Co.	Vending Machines with Liquid Over-feed Technology
ORNL95-0396	American Society of Mechanical Engineers	Non-Heat Treatable Aluminum Alloy Sheet Products

ORNL95-0397	Hughes Missile Systems Co.	Gelcasting Ceramic Defense Products
ORNL95-0398	Doble Engineering/Kahn Instruments	Moisture Sensor for Sulfur Hexafluoride (SF6)-Filled Circuit Breakers
ORNL96-0403	Thermshield International, LTD.	Test Bed Demonstration Project - Radiation Control Coatings
ORNL96-0404	GelTech, Inc.	Novel Cost-Effective Process for the Replication of Hybrid Diffractive/Refractive Optical Elements
ORNL96-0405	Serotech, Inc.	Surface Enhanced Raman Optical Data Storage (SERODS)
Y-1296-0406	Cincinnati Milacron Marketing Co.	Expert System for Machine Tool Coolant Selection
ORNL96-0407	Applied CarboChemicals, Inc.	Production of Chemical Derivatives from Renewables
ORNL96-0408	SPRI/Roof Consultants Institute	Whole Building Roof Re-cover and Drying Demonstration Project
Y-1296-0417	Hyper Velocity, Inc.	Position and Velocity Control of Pneumatic Cylinders for Flexible Assembly Systems
Y-1296-0418	Advanced Lithography Group	HIP Densification Project
ORNL96-0419	Medtronic, Inc.	Development of Thin-Film Batteries for Implantable Medical Devices
ORNL96-0420	Commercial Crystal Laboratories, Inc.	New Crystal-Growth Methods for Producing Lattice-Matched Substrates for High Temperature Semiconductors
ORNL96-0421	Midwest Superconductivity, Inc./Westinghouse Electric Corp.	Advanced Temperature Superconductor Film-Based Process using RABIT Substrates
Y-1296-0422	PDMA Corp.	In Service Motor Performance Diagnostic
Y-1296-0423	Advanced Optical Equipment and Systems Corp.	Development of Advanced Photolytic Iodine Laser Cutting and Joining Technologies for Manufacturing
ORNL96-0424	GelTech/Diff. Int'l./U. of Rochester	Advanced Micro Optics Characterization Using Computer Generated Holograms
Y-1296-0426	Apeiron, Inc.	Advanced Hardware and Software Methods for Thread and Gear Dimensional Metrology
Y-1296-0427	GaSonics Int'l.	Energetic Neutral Beam Cleaning
ORNL96-0428	Materials and Electrochemical Research Corp.	Hydrogen Storage in Organo-Metallic Fullerenes
Y-1296-0429	Clinical Neuro Systems, Inc., Ben Franklin Technology Center	Vascular Occlusive Device Prototyping
Y-1296-0430	Innovative Computing Technologies, Inc.	Sensor Driven Intelligent Control System for Plasma Processing
ORNL96-0431	ERC, Inc.	Intelligent Machine Learning Analysis for Fuel Cell Operations
ORNL96-0432	Charles Evans & Assoc.	Feasibility of Correlating V-Cr-Ti Alloy Weld Strength with Weld Chemistry

ORNL96-0433	Utron, Inc.	A 7 km/s Electrothermal Light Gas Gun (ELGG) Pellet Injector
ORNL96-0434	Lambda Technologies, Inc.	Advanced ECR ION Source with Large Resonant Plasma Volume
ORNL96-0435	Visual Computing Systems Corp.	Flywheel Motor Alternator for Hybrid Electric Vehicles
ORNL96-0436	Stereotaxis, Inc.	Superconducting Coil Amplifier for Magnetic Stereotaxis Neurosurgery
ORNL96-0437	Geltech, Inc.	Cost-Effective, High Precision Fabrication Technologies for Radiation-Resistant Advanced Optical Components
ORNL96-0438	Frigidaire Company	Accelerated Development of Efficient Refrigerator Technologies
ORNL96-0439	Micro-Grain, Inc.	Microwave Treatment as a Pesticide Alternative for Stored-Products
ORNL96-0440	Dow Corning Corp.	High Temperature Particle Filtration Technology
Y-1296-0441	Micramics, Inc.	Specialized Microwave Cure Techniques for Ceramics
ORNL96-0442	Roofing Industry Committee	Investigating the Durability of Roofing Systems in the Aftermath of a Major Wind Storm
ORNL96-0443	Tinsley Labs	Deterministic Fabrication of Optical Components Using Ion-Beam Milling
96MULT-0444	USAMP	Development of Low Cost Powder Metallurgy Technology for Particle Reinforced Aluminum Composites
ORNL96-0445	Union Camp Corp.	Overcoming Constraints to High-yield Plantation-grown Hardwoods in the Southeastern United States
ORNL96-0446	DynEco International, Inc.	Orbital Vane Compressor/Expander Development for Vehicle Fuel Cells
ORNL96-0447	Detroit Diesel Corp.	Motor/Generator Augmentation of Diesel Turbocharge
K-2596-0448	Pall-Pass	Reverse Osmosis Membrane/Pharmaceutical
K-2596-0449	Pall-Pass	Cleanable HEPA Filter Panel Project
ORNL96-0450	Angstrom Tools, LLC	Computational Toolbox for Molecular Nanotechnology
ORNL96-0451	Los Angeles County Department of Public Works	Conceptual Development of an Environmental Data Management System for National Pollutant Discharge Elimination System Compliance
ORNL96-0452	Red Zone Robotics	Generalized Operator Interface for Remote System Control
ORNL96-0453	Solar Turbines, Inc.	Evaluation of Stainless Steels for Primary Surface Recuperator Applications
ORNL96-0454	DCH Technologies, Inc.	Development of Low Cost Hydrogen Sensors and Detectors

ORNL96-0455	American Magnetics, Inc.	Development, Design, and Fabrication of Hybrid High Temperature Superconducting Leads
ORNL96-0456	Maytag Appliances	Demonstration and Evaluation of High-Efficiency, Horizontal-Axis Clothes Washer
ORNL96-0457	Cemcom Research Associates, Inc.	Demonstration of the BEPLATE Electroforming Simulation Code in General Production Conditions and Geometries
ORNL96-0458	Perkin Elmer	Ion Source and Inlet System Fundamentals and Applications
ORNL97-0459	Smith & Nephew Richards, Inc.	Hydroxylapatite Otologic Implants
ORNL97-0460	3M/Southwire/LANL	Development of High Temperature Superconducting Wire Using Coated Conductor Technologies
ORNL97-0461	AlliedSignal, Inc.	Carbon-Carbon Composite Manufacturing II
Y-1297-0462	Pall Pass Corp.	Develop and Fabricate Unclassified Seamless Porous Stainless Steel Filter Tubes
ORNL97-0464	Lockheed Martin Control Systems	Development of Electric Motor and Power Converter Systems
ORNL97-0465	Eaton Corp.	Microwave Nitridation of Sintered Reaction Bonded Silicon Nitride Parts for Natural Gas Fueled Diesel Engines
ORNL97-0466	New England Biolabs, Inc.	AFM Imaging Approach for Locating Proteins on DNA
ORNL97-0468	Mallinckrodt Medical, Inc.	Use of Reactor-Produced Radioisotopes for Prevention of Restenosis After Coronary Angioplasty
Y-1297-0469	Delphi Energy & Engine Management Systems, Div. of Gene	Reduction of Contamination-Related Failurs
Y-1297-0470	American Cyanamid, Inc.	Chemical Banks of Compounds from the Defense Conversion Program
ORNL97-0471	Ceradyne, Inc.	Sintered Reaction Bonded Silicon Nitride Parts by Microwave Nitridation Combined with Gas-Pressure Sintering
ORNL97-0472	Gene Logic, Inc.	Transcriptional Profiling Using the Flowthrough Genosensor
ORNL97-0473	Waters Technology Corp.	Microfabrication Instrumentation for Chemical Sensing in Industrial Process Control
ORNL97-0474	Cummins Engine Co., Inc.	Components for Diesel Fuel Systems Applications
ORNL97-0476	LoTEC, Inc.	Development of a New Cross-Flow Hot-Gas Filter Design
ORNL97-0477	Honeywell, Inc. / Nonvolatile Electronics, Inc.	Atomic Scale Structure of Ultrathin Magnetic Multilayers & Correlation w/Resistance, Giant Magnetoresistance & Spin-Dependent Tunn
ORNL97-0478	Commercial Crystal Laboratories, Inc.	Microwave Processing of Advanced ElectroOptic Materials

ORNL97-0479	Phone Home Technology, Inc.	Community of the Future Initiative
ORNL97-0480	Lambda Technologies, Inc.	Manufacturing of Carbon Fiber Using Variable Frequency Microwave Energy
ORNL97-0481	Weyerhaeuser Company	Advanced Modeling and Materials in Kraft Pulp Mills
ORNL97-0482	ITN Energy Systems	Development of High Charge Capacity, Thin-Film Rechargeable Lithium Batteries
ORNL97-0483	Westvaco Corp.	Development and Characterization of Novel Adsorbent Carbons
ORNL97-0484	Detroit Diesel Corp.	Diesel Engine Exhaust Hydrocarbon Speciation and Analysis
K-2597-0486	Pall Pass US, Inc.	Design and Development of Photocatalytic Membrane System to Remove TOCs in the Production of Ultrapure Water
ORNL97-0487	General Motors Research and Development Center	Spark-Ignited Direct-Injection Engine Modeling: Investigation of Flame Tracking, Energy Deposition, and Burning Rate
ORNL97-0488	Performance Research	Rapid Prototyping of Ceramics
ORNL97-0489	Cummins Engine	NOx Control and Measurement Technology for Heavy-Duty Diesel Engines
ORNL97-0490	Material & Electrochemical Research Corp. (STTR)	High-Yield Fullerene Nanotube Production Systems
ORNL97-0491	H&R Technical Associates	Advanced Heating Pump System for Spacecraft Thermal Management
ORNL97-0492	Halliburton Energy Services, Inc.	Control of Set-on-Demand Concrete
ORNL97-0494	Smith & Nephew, Inc.	Infrared Processing of Polyethylene
Y-1297-0495	Surface Optics Corp.	Spectroradiometer for Rapid Imaging LiOH on LiH
Y-1297-0496	Manufacturing Data Systems, Inc.	Full Feature error Correction for Two and Three Axis Machines
ORNL97-0497	Southern States, Inc.	Application of Multi-Level Inverter Technology to Commercial Power Conditioning, Transmission, and Distribution Products
Y-1298-0498	Deneb Robotics, Inc.	Applied Instructional System for Machinists
ORNL98-0499	Bell Laboratories, Lucent Technologies	Critical Vacancy-Driven Phenomena in High-Energy Ion-Implanted Silicon
ORNL98-0500	General Motors Corp.	Development of a Model to Address Safety and Mobility of Older Drivers
ORNL98-0501	Caterpillar, Inc.	Scuffing Resistance of Zirconia Fuel Injector Components for Diesel Engine Applications
ORNL98-0502	InnerDyne, Inc.	Development of Rhenium-188-Labeled Radioactive Stents for Prevention of Restenosis after Coronary Balloon Angioplasty

Y-1298-0505	Energy Conversion Devices, Inc.	Demonstration of the Technical and Commercial Feasibility for the Production of Negative Electrode Components
ORNL98-0506	B. F. Goodrich Company	Thermo-Mechanical Processing Parameters for Rhondite Steels
Y-1298-0507	Tennessee Tool & Engineering Inc.	Improved Coatings for Dies and Die Components
ORNL98-0508	General Electric Corporation	Gelcasting Alumina Cores for Investment Casting
ORNL98-0509	Physical Sciences, Inc.	Low Noise Readout Electronics for Solid-State Imaging Detector System
Y-1298-0510	McDermott Technology/Foster Wheeler Development	Acoustic Sensors for Monitoring Solids-Gas Flow
ORNL98-0512	Forging Industry Assoc./United Defense/Finkl & Sons/ Scienc	Controlled Nonisothermal Hot Forging Using Infrared for Microstructural Control and Energy Savings
Y-1298-0513	University of North Carolina-Charlotte	Ring Rotacon Construction and Evaluation
ORNL98-0514	Visual Computing Systems	Developing a Low Cost Self-Sensing Inverter with Optional Soft-Switching to Drive a Commercial VCS Permanent Magnet Axial-Gap Motor
ORNL98-0516	Society of Automotive Engineers	ITS Data Bus Demonstration
ORNL98-0517	Cavalier Corp.	Development of Advanced Energy-Efficient Refrigerated Vending and Display-Case Machine
ORNL98-0518	Phillips Petroleum Company	Studies of Petroleum Products Solids Using Acoustic Resonance Spectroscopy
Y-1298-0519	Blasch Precision Ceramics, Inc.	Metal Ceramic Composite Crucible II
ORNL98-0520	Perkin Elmer Corp. and the University of Tennessee	Wireless Luminescence Integrated Sensors (WLIS)
ORNL98-0521	Advanced Vehicle Systems, Chattanooga Area Regional Tra	Development of an Electric Bus Inverter Based on ORNL ART Soft-Switching Technology
ORNL98-0523	Performance Research, Inc.	Improved Automobile Radiator Systems Utilizing Carbon Foam
082290-1	Dow Chemical; Univ. of Tennessee; UT Research Corp.	Power Conservation & Magnesium Electroly
C9800401	USCAR; Analysis & Design Applications Co.	Automotive Underhood Thermal Management Analysis Using 3-D Coupled Thermal Hydrodynamic Computer Models
Y-1292-1082	Sematech	Semiconductor Manufacturing Technologies
LA95J10230 (95ML)	SciBus Analytical, Inc.	Commercialization of Technologies Developed in the Contaminant Analysis Automation (CAA) Program
92MULT026-B2	Supercomputer Automotive Applications (USCAR)	Application of High Performance Computing to Automotive Design and Manufacturing
LA97C10335	Steinbichler, USA, Inc.	Three Dimensional Optical Metrology for Dimensional Component Requalification
PNNL/114	Low Emissions Technologies Research and Development Pa	Die Casting Die Life Extension
94MULT-912ES	USCAR (LEP)	Exhaust Gas Sensors

96MULT-DAMA-00|Textile/Clothing Technology Corp.

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