**2017年度R&D大奖获奖名单**

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| --- | --- | --- |
| **Product** | **Organization** | **Co-Developer(s)** |
| [ACE: The Ageless Aluminum Revolution](https://www.rd100conference.com/awards/winners-finalists/6733/ace-ageless-aluminum-revolution/) | Critical Materials Institute | Eck Industries Oak Ridge National Laboratory Ames Laboratory Lawrence Livermore National Laboratory |
| [ACMZ Cast Aluminum Alloys](https://www.rd100conference.com/awards/winners-finalists/6739/acmz-cast-aluminum-alloys/) | Oak Ridge National Laboratory | Fiat Chrysler Automobiles US LLC Nemak U.S.A. Inc |
| [Acoustic Gunshot Detection Technology](https://www.rd100conference.com/awards/winners-finalists/6703/acoustic-gunshot-detection-technology/) | Pacific Northwest National Laboratory |  |
| [Additively Manufactured High Temperature Polymer-Derived Ceramics](https://www.rd100conference.com/awards/winners-finalists/6746/additively-manufactured-high-temperature-polymer-derived-ceramics/) | HRL Laboratories, LLC. |  |
| [Additively Printed High Performance Magnets](https://www.rd100conference.com/awards/winners-finalists/6775/additively-printed-high-performance-magnets/) | Oak Ridge National Laboratory | Ames Laboratory Critical Materials Institute Magnet Applications Inc. Tru-Design Inc. Momentum Technologies |
| [ANDE](https://www.rd100conference.com/awards/winners-finalists/6704/ande/) | ANDE, A Division of NetBio |  |
| [Applied Biosystems Axiom Microbiome Array](https://www.rd100conference.com/awards/winners-finalists/6662/applied-biosystems-axiom-microbiome-array/) | Lawrence Livermore National Laboratory | Thermo Fisher Scientific |
| [Battelle's Coal-to-Liquids (CTL) Process Using Biomass-Derived Solvents](https://www.rd100conference.com/awards/winners-finalists/6738/battelles-coal-liquids-process-using-biomass-derived-solvents/) | Battelle |  |
| [Benchmarking and Energy Saving Tool for Low-Carbon Cities (BEST Cities)](https://www.rd100conference.com/awards/winners-finalists/6809/benchmarking-and-energy-saving-tool-low-carbon-cities-best-cities/) | Lawrence Berkeley National Laboratory | China Energy Group of Berkeley Lab and the Energy Research Institute of China’s National Development and Reform Commission. Beta-testing: Shandong Academy of Sciences. Based on model originally developed by ESMAP known as TRACE, the Tool for the Rapid Assessment of City Energy. |
| [BESTAI, Building Energy Simulation Technology with Artificial Intelligence](https://www.rd100conference.com/awards/winners-finalists/6810/bestai-building-energy-simulation-technology-artificial-intelligence/) | Industrial Technology Research Institute (ITRI) |  |
| [Boron Suboxide, B6O, Third Hardest Material](https://www.rd100conference.com/awards/winners-finalists/6758/boron-suboxide-b6o-third-hardest-material/) | ATS-MER, LLC |  |
| [BroadSoft Team-One](https://www.rd100conference.com/awards/winners-finalists/6812/broadsoft-team-one/) | BroadSoft, Inc. |  |
| [ChemSEI-Linker](https://www.rd100conference.com/awards/winners-finalists/6760/chemsei-linker/) | Industrial Technology Research Institute (ITRI) |  |
| [CINmat (Microwave Annealing Technology)](https://www.rd100conference.com/awards/winners-finalists/6740/cinmat-microwave-annealing-technology-jointly-developed-chiao-tung-university-itri-mmsl-and-nano-device-laboratories/) | National Chiao Tung University, Department of Electrophysics | Industrial Technology Research Institute, Mechanical and Mechatronics Systems Research Laboratories, National Nano Device Laboratories |
| [Clean-Energy Electrocatalysts without Precious Metals](https://www.rd100conference.com/awards/winners-finalists/6741/clean-energy-electrocatalysts-without-precious-metals/) | Los Alamos National Laboratory | Pajarito Powder, LLC |
| [COBRA - Metabolic Fuel & Energy Sensor](https://www.rd100conference.com/awards/winners-finalists/6664/cobra-metabolic-fuel-energy-sensor/) | MIT Lincoln Laboratory | U.S. Army Research Institute of Environmental Medicine |
| [Compressed Sensing Cardiac Cine](https://www.rd100conference.com/awards/winners-finalists/6813/compressed-sensing-cardiac-cine/) | Siemens Medical Solutions USA, Inc. | Siemens Healthcare, GmbH |
| [Control System for Active Damping of Inter-Area Oscillations](https://www.rd100conference.com/awards/winners-finalists/6707/control-system-active-damping-inter-area-oscillations/) | Sandia National Laboratories | Montana Tech University, Bonneville Power Administration |
| [CoolSo](https://www.rd100conference.com/awards/winners-finalists/6708/coolso/) | Industrial Technology Research Institute (ITRI) |  |
| [CrunchFlow](https://www.rd100conference.com/awards/winners-finalists/6814/crunchflow/) | Lawrence Berkeley National Laboratory | University of Illinois-Champaign |
| [CyberEpi](https://www.rd100conference.com/awards/winners-finalists/6815/cyberepi/) | Industrial Technology Research Institute (ITRI) |  |
| [DecaTxt-IN10DID](https://www.rd100conference.com/awards/winners-finalists/6710/decatxt-in10did/) | IN10DID, Inc. |  |
| [dfnWorks](https://www.rd100conference.com/awards/winners-finalists/6816/dfnworks/) | Los Alamos National Laboratory | Oak Ridge National Laboratory |
| [Digital CoPilot](https://www.rd100conference.com/awards/winners-finalists/6817/digital-copilot/) | The MITRE Corporation |  |
| [Distributed Solar Estimation (DiSE)](https://www.rd100conference.com/awards/winners-finalists/6818/distributed-solar-estimation-dise/) | Lawrence Berkeley National Laboratory |  |
| [Double Barcoded Shotgun Expression Library Sequencing (Dub-seq)](https://www.rd100conference.com/awards/winners-finalists/6667/double-barcoded-shotgun-expression-library-sequencing-dub-seq/) | Lawrence Berkeley National Laboratory |  |
| [Dow Corning TC-2022 Thermally Conductive Adhesive](https://www.rd100conference.com/awards/winners-finalists/6771/dow-corning-tc-2022-thermally-conductive-adhesive/) | The Dow Chemical Company | Delphi |
| [Dow's Advanced FCDh Technology](https://www.rd100conference.com/awards/winners-finalists/6742/dows-advanced-fcdh-technology/) | The Dow Chemical Company | Snamprogetti |
| [Dragonfly - High Speed Confocal Imaging Platform](https://www.rd100conference.com/awards/winners-finalists/6668/dragonfly-high-speed-confocal-imaging-platform/) | Andor |  |
| [dropletProbe Surface Sampling System for Mass Spectrometry](https://www.rd100conference.com/awards/winners-finalists/6670/dropletprobe-surface-sampling-system-mass-spectrometry/) | Oak Ridge National Laboratory | SepQuant, Inc. |
| [EDGE Bioinformatics](https://www.rd100conference.com/awards/winners-finalists/6671/edge-bioinformatics/) | Los Alamos National Laboratory | Naval Medical Research Center |
| [ESGF](https://www.rd100conference.com/awards/winners-finalists/6819/esgf/) | Lawrence Livermore National Laboratory | NASA, NOAA, the international laboratories in the federation, including the Australian National University’s National Computational Infrastructure (NCI), the German Climate Computing Centre (DKRZ), the Institut Pierre-Simon Laplace (IPSL), the Centre for Environmental Data Analysis (CEDA), and the Centre de Recherche Informatique de Montréal (CRIM) |
| [Evolve 5.5 Solid-State Refrigerator](https://www.rd100conference.com/awards/winners-finalists/6673/evolve-55-solid-state-refrigerator/) | Phononic |  |
| [Filler Materials for Welding and 3D Printing](https://www.rd100conference.com/awards/winners-finalists/6780/filler-materials-welding-and-3d-printing/) | Oak Ridge National Laboratory | U.S. Army Tank Automotive Research Development and Engineering Center |
| [Friction Stir Scribe Process for Joining Dissimilar Materials](https://www.rd100conference.com/awards/winners-finalists/6745/friction-stir-scribe-process-joining-dissimilar-materials/) | Pacific Northwest National Laboratory |  |
| [Fusion FIBC / bulk bags](https://www.rd100conference.com/awards/winners-finalists/6781/fusion-fibc-bulk-bags/) | Dow Packaging and Specialty Plastics, a business unit of The Dow Chemical Company. | Next Generation Packaging, LLC |
| [Geometrically Enhanced Photocathode](https://www.rd100conference.com/awards/winners-finalists/6674/geometrically-enhanced-photocathode/) | National Security Technologies, LLC | NanoShift LLC, Lawrence Livermore National Laboratory, General Atomics, Lawrence Berkeley National Laboratory |
| [Ground-Based Sense-and-Avoid System (GBSAA) for Unmanned Aircraft Systems (UAS)](https://www.rd100conference.com/awards/winners-finalists/6825/ground-based-sense-and-avoid-system-gbsaa-unmanned-aircraft-systems-uas/) | MIT Lincoln Laboratory | U.S. Army, SRC Inc., Kutta Technologies |
| [HADES: The High-Fidelity Adaptive Deception & Emulation System](https://www.rd100conference.com/awards/winners-finalists/6711/hades-high-fidelity-adaptive-deception-emulation-system/) | Sandia National Laboratories |  |
| [High Power Impulse Plasma Source (HiPIPS)](https://www.rd100conference.com/awards/winners-finalists/6782/high-power-impulse-plasma-source-hipips/) | Southwest Research Institute |  |
| [High-performance, low-cost, flexible, single-crystal-like, GaAs-based Thin Film Transistors](https://www.rd100conference.com/awards/winners-finalists/6713/high-performance-low-cost-flexible-single-crystal-gaas-based-thin-film-transistors/) | TexMat LLC | TapeSolar Inc. |
| [HP Jet Fusion 3D 4200 Printing Solution](https://www.rd100conference.com/awards/winners-finalists/6747/hp-jet-fusion-3d-4200-printing-solution/) | HP, Inc. |  |
| [HT-ESP Motor](https://www.rd100conference.com/awards/winners-finalists/6714/ht-esp-motor/) | Los Alamos National Laboratory | Chevron Energy Technology Company |
| [IBM Q](https://www.rd100conference.com/awards/winners-finalists/6826/ibm-q/) | IBM |  |
| [IceStorm90](https://www.rd100conference.com/awards/winners-finalists/6785/icestorm90/) | Coulson Ice Blast |  |
| [IE5-class efficiency amorphous motor](https://www.rd100conference.com/awards/winners-finalists/6717/ie5-class-efficiency-amorphous-motor/) | Hitachi, Ltd. | Hitachi Industrial Equipment Systems Co.,Ltd. |
| [INNATE Precision Packaging Resins](https://www.rd100conference.com/awards/winners-finalists/6786/innate-precision-packaging-resins/) | Dow Packaging & Specialty Plastics, a business unit of The Dow Chemical Company |  |
| [IRcell](https://www.rd100conference.com/awards/winners-finalists/6677/ircell/) | IRsweep | Pacific Northwest National Laboratory |
| [Lake Shore Cryotronics 8600 Series VSM](https://www.rd100conference.com/awards/winners-finalists/6679/lake-shore-cryotronics-8600-series-vsm/) | Lake Shore Cryotronics, Inc. |  |
| [Large-Format Additive Coating Solutions](https://www.rd100conference.com/awards/winners-finalists/6749/large-format-additive-coating-solutions/) | Tru-Design, LLC | Polynt Composites, Oak Ridge National Laboratory |
| [LCD Waste Recycling System](https://www.rd100conference.com/awards/winners-finalists/6787/lcd-waste-recycling-system/) | Industrial Technology Research Institute (ITRI) |  |
| [Liquid Nails Fuze\*It All Surface](https://www.rd100conference.com/awards/winners-finalists/6790/liquid-nails-fuzeitr-all-surface/) | PPG |  |
| [MAX (Modular Agile eXoskeleton)](https://www.rd100conference.com/awards/winners-finalists/6791/max-modular-agile-exoskeleton/) | suitX | University of California, Berkeley |
| [MicroPro Series Grill](https://www.rd100conference.com/awards/winners-finalists/6767/micropro-series-grill/) | Tupperware Brands Corporation |  |
| [MPV-800 Multipoint Vibrometer](https://www.rd100conference.com/awards/winners-finalists/6682/mpv-800-multipoint-vibrometer/) | Polytec GmbH |  |
| [Multibed Adsorption Recuperative Cooling (MARCool) System](https://www.rd100conference.com/awards/winners-finalists/6792/multibed-adsorption-recuperative-cooling-marcool-system/) | Pacific Northwest National Laboratory | Arkema |
| [Multiple Operating system Rotation Environment Moving Target Defense](https://www.rd100conference.com/awards/winners-finalists/6719/multiple-operating-system-rotation-environment-moving-target-defense/) | Argonne National Laboratory |  |
| [MultiWell MicroFormulator](https://www.rd100conference.com/awards/winners-finalists/6683/multiwell-microformulator/) | Vanderbilt University | CN Bio Innovations |
| [National Risk Assessment Partnership Toolset](https://www.rd100conference.com/awards/winners-finalists/6828/national-risk-assessment-partnership-toolset/) | National Energy Technology Laboratory (NETL) | Los Alamos National Laboratory, Lawrence Berkeley National Laboratory, Lawrence Livermore National Laboratory, Pacific Northwest National Laboratory |
| [Non-invasive Fiber Optic Physiological Monitoring Technology (nFOPT) and Smart Care System](https://www.rd100conference.com/awards/winners-finalists/6720/non-invasive-fiber-optic-physiological-monitoring-technology-nfopt-and-smart-care-system/) | Huijia Health Life Technology Co., Ltd. |  |
| [NovaSeq Series](https://www.rd100conference.com/awards/winners-finalists/6685/novaseq-series/) | Illumina |  |
| [Oleo Sponge](https://www.rd100conference.com/awards/winners-finalists/6793/oleo-sponge/) | Argonne National Laboratory |  |
| [PHM, Prognostic and Health Management Software in Semiconductors](https://www.rd100conference.com/awards/winners-finalists/6829/phm-prognostic-and-health-management-software-semiconductors/) | Industrial Technology Research Institute (ITRI) |  |
| [PipeAssess PI](https://www.rd100conference.com/awards/winners-finalists/6830/pipeassess-pi/) | Battelle |  |
| [PolarDry Electrostatic Spray Dryer](https://www.rd100conference.com/awards/winners-finalists/6755/polardry/) | Fluid Air | Spraying Systems Co. |
| [Polarimetric Co-location Layering](https://www.rd100conference.com/awards/winners-finalists/6831/polarimetric-co-location-layering/) | MIT Lincoln Laboratory |  |
| [Power and Thermal-aware Electronic System Level Platform, PT-ESL](https://www.rd100conference.com/awards/winners-finalists/6832/power-and-thermal-aware-electronic-system-level-platform-pt-esl/) | Industrial Technology Research Institute (ITRI) |  |
| [Premium Compact Process Primer](https://www.rd100conference.com/awards/winners-finalists/6794/premium-compact-process-primer/) | PPG |  |
| [PRESymptomatic AGent Exposure Detection (PRESAGED)](https://www.rd100conference.com/awards/winners-finalists/6833/presymptomatic-agent-exposure-detection-presaged/) | MIT Lincoln Laboratory | U.S. Army Medical Research Institute of Infectious Diseases |
| [Prime 95B Scientific CMOS Camera](https://www.rd100conference.com/awards/winners-finalists/6688/prime-95b-scientific-cmos-camera/) | Photometrics |  |
| [Pulse-to-Pulse Phase Diversity Processing for Interference Suppression and Range Disambiguation](https://www.rd100conference.com/awards/winners-finalists/6835/pulse-pulse-phase-diversity-processing-interference-suppression-and-range-disambiguation/) | MIT Lincoln Laboratory |  |
| [Q-Carbon and Diamond Related Products](https://www.rd100conference.com/awards/winners-finalists/6795/q-carbon-and-diamond-related-products/) | Q-Carbon, LLC | North Carolina State University |
| [Radiation Field Training Simulator (RaFTS)](https://www.rd100conference.com/awards/winners-finalists/6690/radiation-field-training-simulator-rafts/) | Lawrence Livermore National Laboratory |  |
| [Radiation Pressure Power Meter](https://www.rd100conference.com/awards/winners-finalists/6691/radiation-pressure-power-meter/) | Scientech Inc. | National Institute of Standards and Technology |
| [Resin Transfer Molding (RTM) 370 Resin for High-Temperature Applications](https://www.rd100conference.com/awards/winners-finalists/6796/resin-transfer-molding-rtm-370-resin-high-temperature-applications/) | NASA Glenn Research Center |  |
| [Ropaque NT-2900 Opaque Polymer for BLUE 4EST Thermal Paper](https://www.rd100conference.com/awards/winners-finalists/6797/ropaque-nt-2900-opaque-polymer-blue-4est-thermal-paper/) | The Dow Chemical Company | The Koehler Paper Group |
| [Rust-Oleum META Prime](https://www.rd100conference.com/awards/winners-finalists/6798/rust-oleum-meta-prime/) | Rust-Oleum |  |
| [Safe2Ditch: An Autonomous Emergency Flight Management System That Finds Safe and Clear Crash Sites for Unmanned Aerial Vehicles in Emergency Situations](https://www.rd100conference.com/awards/winners-finalists/6837/safe2ditch-autonomous-emergency-flight-management-system-finds-safe-and-clear-crash-sites-unmanned-aerial-vehicles-emergency-si/) | NASA Langley Research Center |  |
| [Safeguard](https://www.rd100conference.com/awards/winners-finalists/6838/safeguard/) | NASA Langley Research Center |  |
| [SAFIRE - Safe Impact Resistant Electrolyte](https://www.rd100conference.com/awards/winners-finalists/6799/safire-safe-impact-resistant-electrolyte/) | Oak Ridge National Laboratory | University of Rochester |
| [SensoSCAN](https://www.rd100conference.com/awards/winners-finalists/6693/sensoscan/) | Sensogram Technologies Inc |  |
| [SerialTap](https://www.rd100conference.com/awards/winners-finalists/6722/serialtap/) | Pacific Northwest National Laboratory |  |
| [Shape Memory Alloy Rock Splitters (SMARS)](https://www.rd100conference.com/awards/winners-finalists/6757/shape-memory-alloy-rock-splitters-smars/) | NASA Glenn Research Center | Jacobs Engineering |
| [SHIELDS Space Weather Platform](https://www.rd100conference.com/awards/winners-finalists/6839/shields-space-weather-platform/) | Los Alamos National Laboratory | University of Michigan |
| [Smart LEak Detection (SLED) System](https://www.rd100conference.com/awards/winners-finalists/6840/smart-leak-detection-sled-system/) | Southwest Research Institute |  |
| [SolidSense Gas Analyzer](https://www.rd100conference.com/awards/winners-finalists/6694/solidsense-gas-analyzer/) | Sandia National Laboratories | University of New Mexico |
| [Structures for Lossless Ion Manipulations (SLIM)](https://www.rd100conference.com/awards/winners-finalists/6696/structures-lossless-ion-manipulations-slim/) | Pacific Northwest National Laboratory |  |
| [Sun Light Spectrum Separation for Agriculture & Photovoltaic](https://www.rd100conference.com/awards/winners-finalists/6802/sun-light-spectrum-separation-agriculture-photovoltaic/) | Institute of Advanced Technology (IAT) | Optoelectroic Science and Technology Laboratory, University of Science and Technology of China (USTC) |
| [Syl-Off EM Silicone Emulsion](https://www.rd100conference.com/awards/winners-finalists/6803/syl-em-silicone-emulsion/) | Dow Corning Europe S.A. |  |
| [TEAMM- Electrafil PPS 3D; Electrafil PPSU 3D](https://www.rd100conference.com/awards/winners-finalists/6761/teamm-electrafil-pps-3d-electrafil-ppsu-3d/) | Techmer PM | BASF, Oak Ridge National Laboratory |
| [The Lightning Pack (Electricity Generating Backpack)](https://www.rd100conference.com/awards/winners-finalists/6805/lightning-pack-electricity-generating-backpack/) | Lightning Packs, LLC |  |
| [The Microgrid Design Toolkit (MDT)](https://www.rd100conference.com/awards/winners-finalists/6842/microgrid-design-toolkit-mdt/) | Sandia National Laboratories |  |
| [Ultra-Wide-Bandgap Power Electronics](https://www.rd100conference.com/awards/winners-finalists/6726/ultra-wide-bandgap-power-electronics/) | Sandia National Laboratories |  |
| [Ultrathin multifunctional hybrid coatings and processes](https://www.rd100conference.com/awards/winners-finalists/6806/ultrathin-multifunctional-hybrid-coatings-and-processes/) | General Motors | Forge Nano (Formerly PneumatiCoat Technologies) |
| [VORA Zzz Additive Technology for Ultra-High Airflow PU Memory Foam](https://www.rd100conference.com/awards/winners-finalists/6807/vora-zzz-additive-technology-ultra-high-airflow-pu-memory-foam/) | The Dow Chemical Company |  |
| [Wearable Detection Device (WDD)](https://www.rd100conference.com/awards/winners-finalists/6727/wearable-detection-device-wdd/) | Radiation Detection Technologies, Inc. | SMART Laboratory (Kansas State University), Electronics Design Laboratory (Kansas State University), Alion Science and Technology Corp., Defense Threat Reduction Agency (DTRA) |
| [Wide-area Infrared System for Persistent Surveillance (WISP)](https://www.rd100conference.com/awards/winners-finalists/6728/wide-area-infrared-system-persistent-surveillance-wisp/) | MIT Lincoln Laboratory |  |
| [WikiEpiCast](https://www.rd100conference.com/awards/winners-finalists/6729/wikiepicast/) | Los Alamos National Laboratory |  |
| [ZEISS Celldiscoverer 7](https://www.rd100conference.com/awards/winners-finalists/6698/zeiss-celldiscoverer-7/) | Carl Zeiss Microscopy GmbH |  |
| [Zirconia Electrochemical Hydrogen Safety Sensor](https://www.rd100conference.com/awards/winners-finalists/6730/zirconia-electrochemical-hydrogen-safety-sensor/) | Los Alamos National Laboratory | Lawrence Livermore National Laboratory, Hydrogen Frontier, Inc. |