

Argonne's Transportation Program

Partnering with Industry to Develop Cleaner, Energy-Efficient Transportation Alternatives

Did you know...

As part of our mission as a U.S. Department of Energy (DOE) research facility, Argonne is developing technologies that are helping make **next-generation vehicles a reality**.

Our Transportation Technology R&D Center brings together scientists and engineers from many disciplines to find **cost-effective solutions to the problems of foreign oil dependency and greenhouse gas emissions**.

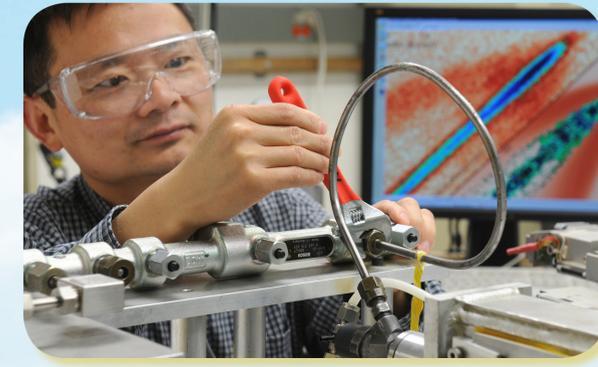
As you walk through our display and see the technologies we are working on here at Argonne, remember that our goal is **not just to develop advanced vehicle technologies, or improve recycling technologies, or reduce the amount of fuel used — we are working with DOE, other federal agencies, and our industrial partners to put new transportation technologies on the road that are changing the way we live and contributing to a better, cleaner future for all of us.**

TTRDC Research Areas

Research at the Transportation Technology Research & Development Center focuses on several areas, including:

- ▶ Batteries
- ▶ Hydrogen & Fuel Cells
- ▶ Vehicle Systems
- ▶ Advanced Engines
- ▶ Applied Materials Research
- ▶ Recycling
- ▶ Smart GRID
- ▶ Alternative Fuels
- ▶ Hybrid Electric and Plug-in Hybrid Electric Vehicles

The BMW Hydrogen 7 Mono-Fuel demonstration vehicle is parked for the mandatory soak period prior to emissions testing at Argonne's Advanced Powertrain Research Facility (APRF).



Argonne physicist Jin Wang makes adjustments to a machine used for examining high speed jets.

Research Partners

To advance research, Argonne partners with government agencies and major industry leaders such as:

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| Arvin Meritor | Research Institute | Magna |
| BASF | Electro-Motive Diesel, Inc. | Mahle Powertrain |
| BMW of North America, LLC | EnerDel | Navistar |
| Caterpillar | Enova | Nissan |
| ChallengeX | Envia | Oshkosh |
| China Automotive Technology & Research Center | ExxonMobil | PACCAR Inc. |
| Chrysler | Ford | Toda Kogyo |
| Cummins | General Motors | U. S. Department of Transportation |
| Dana | Hyundai | U.S. Department of Defense |
| Delphi | John Deere | U.S. Environmental Protection Agency |
| Electric Power | Johnson Controls | |
| | Lockheed Martin | |



Researchers Ali Erdemir (left), Guidem Kartal, and Osman Eryilmaz load engine components into the deposition system used to apply Argonne's superhard and slick coating. The coating increases efficiency and reliability in engines. The technology received a 2009 R&D 100 Award.

Visit www.transportation.anl.gov to learn more!



INVENTING THE FUTURE. *efficient. clean. safe.*



Research funding provided by the U.S. Department of Energy's Vehicle Technologies Program.

