

Low Inertia Permanent Magnet Machines

Objective

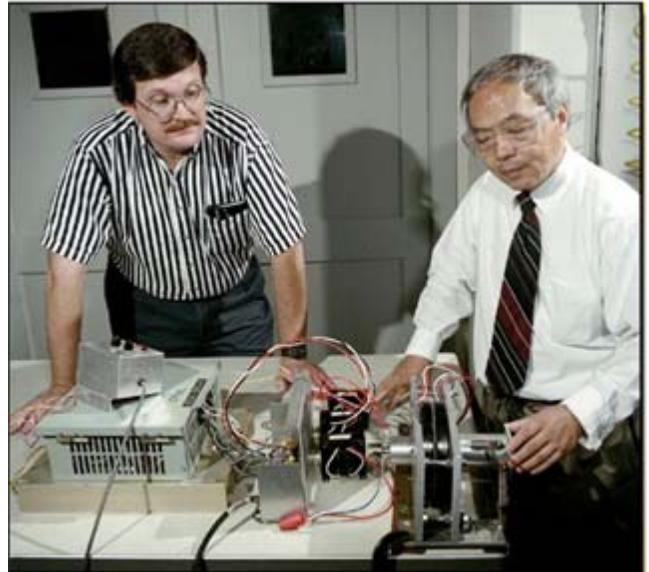
To develop and test a low-inertia permanent magnet motor and drive system with lightweight rotor and high power density.

Technology Importance

- Provides rapid responses for servo applications.
- Reduces heat losses for motors with frequent starts and stops.
- Reduces kinetic energy storage for ultrahigh-speed motors.

Applications

- Control systems requiring rapid responses
- Flight simulators



ORNL researchers Cliff White (left) and John Hsu operate a low inertia permanent magnet motor and drive system.

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