

Nominee: Dr. Tom Kerns
Nominator: Kerry England
Research by: Ann Nguyen

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CONSIDER**

➤ **Background Information:**

- Dr. Kerns is an RSTU professor in the Engineering Department. Four years ago, as students brainstormed ideas for a group project, he **encouraged them to be original and ambitious** in their goals. With his support, they chose a project that even successful and innovative businesses won't touch: the development of a **fuel-efficient electric car**.
- Dr. Kerns came up with the idea to integrate vehicular components in a new way.
- He oversees the project (designing, building, etc.) and serves as a mentor, source of information, helping hand, and inspiration to the volunteers.
- About 20 volunteers have worked on this project over the past few years. They receive no pay or academic credit. They and Dr. Kerns meet weekly to discuss progress and plans.
- They have built a red sports car that can accelerate to 100mph in 6 seconds and run 100 miles/gallon.

➤ **Motivation:**

- Dr. Kerns wishes to **motivate students** and, through a hands-on project, **show that they can make a positive impact on the world**.

➤ **Project Mission:**

- **To push students to higher levels of achievement and confidence in the field of engineering.**
- **To challenge the public perception that fuel-efficient vehicles are ugly, hard to drive, and impossible to create** (especially by mere students) and to demonstrate the viability of such cars.
- The project lets students design, integrate, and test the car's systems in a hands-on manner.
- Dr. Kerns is documenting the computer controls in order to write a program for a screen that will sit on the dashboard and instantaneously display pertinent information (battery voltage, mileage, etc.).

➤ **Funding:**

- Some businesses have helped fund the project, but most (including Volkswagen) have been reluctant out of skepticism or fear of competition in the Michelin Challenge (see **Recognition**).
- Due to lack of support from RSTU and outside businesses, **Dr. Kerns has had to provide much of the project's funding himself** (see **Dedication**).
- With greater exposure and more sponsors, production of these **efficient, environment-friendly cars for public use** might be possible.
- Any profits earned would probably **help fund student projects in the RSTU Engineering Dept.**

➤ **Dedication:**

- In addition to his duties as a professor, Dr. Kerns **has devoted himself to this project without pay** for three summers over the past **four years**.
- **He has had to spend over \$10,000 of his own money** on this project.
- He **has inspired great diligence, inventiveness, and loyalty** in the volunteers, including the nominator (an RSTU Electromechanical Technician); two graduates who returned to help; and a current student who runs the project's webpage (www.njaneer.com) and has devoted over 2000 hours to the designing process.
- When any student is unable to complete a portion of the project, Dr. Kerns finishes it for him/her.

➤ **Recognition:**

- The car will compete in October's Michelin Challenge, a race from L.A. to Las Vegas whose participants will include many major automakers.
- Dr. Kerns and one of the students were keynote speakers at the Pro/USERS Conference 2001, an event attended by numerous businesses that use Pro/E (a computer engineering/design program). Several company representatives were interested in funding the project.
- The students are trying to present the car on *The Tonight Show with Jay Leno*; the host is a car fanatic.