

MOUNTAIN BOARD CONCEPT

For a class in small vehicle design, Bang Sungil of San Francisco's Academy of Art College reinterpreted the mountain board, a hybrid snowboard/skateboard used for all-terrain downhill boarding, a new trend in extreme sports. Constructed of carbon-fiber layers, the lightweight, ergonomic four-wheel skater has side handlebars for tricks, a snowboard-style binding that adjusts to different angles, and a shock-absorbent suspension system. "It's a nicely engineered, well-thought-out product," remarked Probst. "It's a logical progression from skateboard to snowboard to this."

**SKI DESIGN FOR NORDIC BACKCOUNTRY TRAVEL**

Smith described University of Calgary industrial-design student Ernest McCrank's project as "a high-tech evolution of the snowshoe." Developed for McCrank's master's thesis project, the ski is not a piece of high-performance equipment but standard gear for people living in rural snowy regions. The biomimetic design was modeled in part on the propulsive action of the water strider, an insect that uses the surface tension of the water/air boundary to move. The ski is constructed of a woven fiberglass top sheet, a lightweight foam core with steel edges, and a ribbed base for stability. A pair of nylon "quillsets," or lateral panels, deploys upon rearward and downward movement to sinter snow crystals and support the user.

**THINK SCOOTER**

When designing a new electric scooter for a project sponsored by Ford, Elizabeth Yoon, an industrial-design student at Detroit's College for Creative Studies, looked at problems with the current crop of scooters, such as poor security, minimal cargo space, and limited battery-charging sources. She proposed a rounded body shape that looks like a C in the riding position and an O when stationary, thanks to an adjustable seat that curves out to lock into the dashboard when the scooter is parked on the street or docked at a charging station. A removable semicircular storage compartment, with enough cargo room for two helmets and plenty of gear, comes equipped with a handle and wheels for easy lugging. Smith described the bike's curved form as "one feature that does a lot," adding, "It's a great diversion from other city transportation concepts."

