

# Easy Ice does it

Students from the University of Pretoria recently participated in a national innovation competition, aimed at uncovering useful innovations from students around the country.

"The National Innovation Competition is a project of the Innovation Fund, which is a body that supports innovation in South Africa with funds from the Department of Science and Technology. It decided that innovation is not only for the big companies, but also for students and young minds," says Prof Anastassios Pouris, Director of the Institute of Technological Innovation at the University of Pretoria.

Prof Pouris says the Innovation Fund believes that companies follow innovation according to predetermined paths and that young students don't know that some things can't be done: an attitude that drives their efforts. The Innovation Fund supports this competition at all universities in South Africa. Students are asked to submit business plans outlining their ideas and a panel of experts then judges their submissions. The top three business plans in the country competed against each other in the second round with the winners receiving R500 000 in prize money. Thirty-one business plans were received for the University of Pretoria competition and that made the adjudication of the winners extremely difficult.

## Easy Ice

Heiko Schnoor, Glen Brown and Timo Roemer won first prize in the University of Pretoria phase of the competition. The team developed a product called Easy Ice – a device to make ice cubes that does not require integrated refrigeration and is affordable and easy to use. "Basically, what we've done is design an ice machine that is affordable



→ The University of Pretoria mechanical engineering students who won the first prize of R50 000 in the National Innovation Competition are (from left): Heiko Schnoor, Timo Roemer and Glen Brown. Sharing in their joy are Prof Robin Crewe, Vice-Principal, and Prof Anastassios Pouris, Director of the University's Institute for Technological Innovation (right).

for everybody. You can upgrade your home fridge with this. Current ice fridges with integrated ice fridges can cost up to R15 000 and not everybody can afford them. Our design doesn't have its own cooling unit, but it's a small unit that can be placed in the freezing compartment of a fridge, thereby upgrading the fridge. The production cost of one machine is around R100," says Timo Roemer.

The Easy Ice is a little device that is filled with water that is kept at just above freezing temperature – one degree Celsius. A submersible pump pumps water into an ice tray and because the temperature is only at one degree Celsius, the water freezes quickly. "This is quite a productive little machine. We basically developed it because we were always running out of ice and it became tedious filling the ice trays and we needed a solution," says Glen Brown.

The three students say winning the award is a huge bonus to them and they plan to use the R50 000 prize money to develop their machine further. They believe that with the right backing, they can get it into production and have it available in shops at a cost of around R300. "We've patented a couple of the design features and we really want to sell it and hopefully make millions," says Heiko Schnoor.



→ The automatic ice cube-making machine, provisionally patented and developed by three junior mechanical engineering students.

The second prize in the innovation competition went to Armand Basson for his innovation called Bonafide Notes, a product that verifies seven security features on South African bank notes. Jeff Verlinden and Jan Adam Zieba walked off with the third prize. They developed a product that provides a cheap, extendible sound system that requires no installation and allows for additional speakers to be purchased progressively over time. 📍