



**Novi Ineke CEMPAKA  
WANGI**

**Home Country  
Indonesia**

**Degree  
PhD in Electrical  
Engineering**

**Expertise  
Civil and Electrical  
Engineering**

**Research Focus  
Wireless  
Telecommunication  
Networking**

**Host University  
Delft Institute of  
Technology,  
The Netherlands**

**Fellowship Awarded  
2005**

Novi Ineke Cempaka Wangi was born and raised in a small town in Central Java, Indonesia. She moved to Bandung city in West Java while in high school and obtained her bachelor's degree at Bandung Institute of Technology. Married with two children, she has two older sisters and one younger brother.

In 2002 Novi went to The Netherlands to study at the Delft Institute of Technology, where she is now working to obtain her doctorate in electrical engineering.

At Delft, Novi's research topic is Federation of Personal Networks. It is envisaged that almost every artifact will eventually be equipped with digital computing, storage and communication capabilities.

At the same time, similar developments have taken place in communications technology. A range of wireless technologies that cover virtually the whole spectrum of potential user needs will reach the market in the coming decade. Further miniaturization and provision of self-powering capabilities to wireless sensors and actuators together with inexpensive processing devices are providing a basis to create environments that are smart and reactive.

A Personal Network (PN) is a person-centric network connecting various personal devices and artifacts regardless of geographical location. The resources that can become part of a PN will be very diverse. For example, one could think of computers, PDAs, phones, headsets, displays, cameras, Internet-enabled appliances, sensors and actuators. A PN is very much centered on the person and his or her needs. While improving the quality of life, this technology will accommodate future communication, which is more about adapting to the needs of individuals.

On completion of her studies, Novi plans to teach at Bandung Institute of Technology.