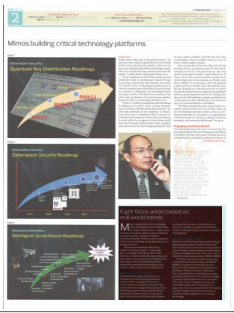
Headline	**Eight focus areas based on real world trends**		
Date	**29 Mar 2010**	Language	**English**
MediaTitle	**The Edge**	Page No	**2**
Section	**NetV@lue 2.0**	Article Size	**148 cm²**
Journalist	**N/A**	Color	**Full Color**
Frequency	**Weekly**	ADValue	**2,647**
Circ / Read	**20,000 /**	PRValue	**7,940**



Eight focus areas based on real world trends

Mimos' applied research/technology areas are based on real-world trends, focusing on eight areas — cyber space security, encryption systems, grid computing and multi-service networks, wireless broadband, MEMS/NEMS systems, advanced informatics, knowledge technology and micro-energy systems.

These areas have been refined into eight technology clusters — knowledge grid, knowledge technology, information security, wireless communications, advanced informatics, micro-systems and MEMS, nano electronics and green technology. Nano-electronics and green technology are new clusters, which require some explanation.

GREEN TECHNOLOGY CLUSTER

The green technology cluster involves developing reference design platforms, such as power management systems, which can directly impact society through conservation of energy and resources. Green technology applied research at Mimos will accelerate improvement in current areas such as environmental conservation, green transportation systems, carbon economy, green eco-system management, pollution control, renewable energy sources and disaster management.

NANO-ELECTRONICS CLUSTER

Mimos is currently exploring nanotechnology-based sensor and photovoltaic cell devices. The main focus in the research is the growth of nanostructures, and includes characterisation, testing and integrating them into nano/micro-electronic mechanical systems (NEMS/MEMS).

The Nano-electronics centre is focusing on integrating nanotechnology into NEMS/MEMS to create new innovative systems. From the initial modelling to the growth and synthesis of nanostructures, followed by the characterisation and testing, the centre provides quality research on nanotechnology to support industrial sectors such as micro/nano-electronics, renewable energy, bio and health, safety and environment and agriculture. It is also responsible for formulating an R&D strategy towards the realisation of nanotechnology integration into existing technology.