



IEEE – Joint CSS/R&A Societies Chapter, Queensland, and  
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present

## **Improving your Process Control Makes Sense -- and Dollars Too !**

**Mike Brisk** FTSE, FIEAust, FIChemE  
Emeritus Professor, Chemical Engineering, Monash University

**Date :** 29 July 2003  
**Time :** 5:30pm for 6:00pm (Light refreshments will be provided from 5:30pm)  
**Venue :** Hawken Auditorium Engineering House, Institution of Engineers Australia  
447 Upper Edward Street, Brisbane

**Abstract:** Fifteen years ago the University of Sydney Warren Centre's study on the benefits of advanced process control used six Australian plant case studies to demonstrate that introducing improved control systems could provide bottom-line benefits in the range of two to six percent of operating costs. Throughout the nineties there have been many reported successes which achieved, or exceeded these economic returns by employing a host of advanced technologies. A plethora of multivariable predictive controls, inferential sensors, fundamental dynamic modelling tools, fuzzy logic, and neural networks are available in the market. So does it follow that we are achieving the best possible process control performance and realising those benefits?

The answer, unfortunately, is an emphatic no! Recent studies have shown that only about a third of industrial controllers, irrespective of their level of technology, are achieving acceptable levels of performance. Indeed there are reported trends which indicate the gap between desired and actual controller performance is widening!

This talk will revisit the Warren Centre study and its benefits analysis methodology, and then address some of the issues related both to the introduction of improved process control, and also the often overlooked issues of ensuring continued maintenance of the best performance of existing controls, including the humble – but vital – PID controller.

**Speaker:** Professor Michael Brisk's career has spanned both industry and academia in roughly equal proportions over forty years. He graduated with the University Medal in Chemical Engineering from the University of Sydney in 1960, and obtained a PhD from the same university in 1965. In the early sixties he lectured in chemical engineering at Sydney. He returned to Sydney in 1971 as senior lecturer in chemical engineering after working in process control and reaction engineering with ICI in the UK for six years.

He joined ICI Australia in 1983, managing applied research in Sydney, before transferring to ICI Australia Engineering in Melbourne in 1988 to establish the Advanced Process Control Group. Later, as an Engineering Associate, and International Technology Leader in advanced process control for the ICI Group worldwide, he led the development of the Group's process control strategy, working with ICI engineers in the UK, South Africa and the Asia Pacific region.

In 1995 he joined Monash University as Dean of Engineering, a position he held for eight years. He retired from Monash at the end of 2002, and was appointed an Emeritus Professor in recognition of his contributions to the University.

Professor Brisk is a Past President of the NSW Group of the Institution of Chemical Engineers, and a recipient of the tripartite IEAust/IChemE/RACI Award for Excellence in Applied Chemical Engineering for his work in process control. He is an elected Fellow of the Australian Academy of Technological Sciences and Engineering.

In his retirement he continues to teach part-time in Chemical Engineering at Monash; has taken on the honorary role of Chairman of the Accreditation Board of the Institution of Engineers, Australia, and is engaged in some industrial consulting in process control.

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