



[<<back to News Archive](#)

## Australian researchers slice five years off R&D delivery



**Comminution '98 Delegates Professor Peter King, Dr Barry Wills, and Professor Tim Napier-Munn**

The delivery time between developing new machines for mineral processing and bringing them into full scale use had shortened by about five years, a leading American-based specialist in metallurgical engineering said in Brisbane recently.

Addressing a gathering of about a hundred mining industry delegates from ten countries at Brisbane's Sheraton Hotel for the Comminution 98 conference, University of Utah Comminution Centre director Professor Peter King said research and development in

comminution—the processes associated with grinding and milling ore—was increasing at a rapid rate.

He said a number of organisations represented at the conference, including The University of Queensland's Julius Kruttschnitt Mineral Research Centre, had contributed to new developments in mineral processing now in use world wide.

Professor King acknowledged comments made by specialists in the field, such as the manager of the JKMRC's commercial arm JKTech, Dr Rob Morrison, who told delegates that it now takes about ten years of blood, sweat, tears, and many dollars to bring a new machine into use in comminution.

Professor King said that the same statement made a decade ago would have placed expected delivery at 15 years instead of 10 years.

"This follows the accelerated development of research techniques in comminution during the past 15 years."

Professor King pointed to research tools such as the Hopkinson's Bar, Discrete Element Methods (DEM), and a new generation of computer simulators, such as JKSimMet used to optimise the performance of AG/SAG mills, as being standards followed by the rest of the world.

"These techniques and devices would have raised eyebrows a few years ago but are now commonplace and very much a part of the currency of comminution research."

He said comments from presenters such as ANI Bradken's Cameron Briggs asking delegates to consider a crusher as much more than a 'black box,' but that action within the crusher cavity should be simulated, would give minerals processors better answers to current problems.

Professor King said the Comminution 98 conference had been both worthwhile and effective.

"There's a definite role for this kind of meeting which concentrates entirely on comminution, attracting people who are committed to research and development in this field."

He said the importance of a conference of this kind was demonstrated in the range and the breadth of the presentations.

Among the presenters in Brisbane for the Comminution conference were representatives from Quebec, Nottingham, and Melbourne Universities, South African organisations Anglovaal Minerals, Hatch Africa and Mintek, Universities of Witwatersrand and Natal, USA manufacturer Eimco Process Equipment, Australian-based companies Hamersley Iron, Warman International Ltd, Newcrest Mining Ltd, Minproc Engineers Ltd, and ANI Bradken, as well as Australian research organisations such as the Julius Kruttschnitt Mineral Research

Centre and CSIRO.

Also represented at the conference were delegates from Norway, Chile, Brazil, Iran, and Saudi Arabia.

Conference organiser Dr Barry Wills led a delegation from CSMA Ltd and the Camborne School of Mines in the United Kingdom—one of the world's oldest and most distinguished mining schools.

Professor King thanked Dr Wills who had encouraged a good flow of ideas at the conference.

"We have seen a number of very interesting developments at the conference, and I am confident that the University of Utah Comminution Centre would join forces with the JKMRRC again at this kind of meeting," Professor King said.

(Ends)

**For further information contact:**

JKMRRC Director [Professor Tim Napier-Munn](#): +61 7 3365 5806

JKMRRC Communication Officer [Mr David Goeldner](#): +61 7 3365 5848