

## High Profile Visitors at the MCN

Prominent Australian research facilities, such as the MCN, are often granted the opportunity to host and entertain distinguished individuals, but it is rare to host three such esteemed guests on a single occasion. The Honorable Alan Griffin M.P., Federal Minister for Bruce (in which the MCN is located); along with Mark Dreyfus Q.C. M.P., the Federal Minister for south-neighboring region, Isaacs, and Anna Burke M.P., the Federal Minister for west-neighboring Chisholm, visited the MCN on the December 9, 2011. In addition to the Federal Members, the tour was attended by Professor Rod Hill, Pro-Vice Chancellor for Industry Engagement and Commercialisation, Tony Lupton, former State Cabinet Secretary and current Professor for Innovation and Public Policy at Monash University, and Radha Thomas of Industry Engagement and Commercialisation, Monash University.

Our guests were treated to a personal tour of the MCN facility, escorted by the MCN Director, Dwayne Kirk. Passing by the Physical Vapor Deposition (PVD) stations, the delegates were fascinated by MCN's Class 100 Clean room areas, a highly filtered environment capable of removing 99.99% of the particles found in ambient air.

During the tour, the federal delegates conveyed particular interest into the functioning of our Electron Beam Lithography (EBL); capable of writing features less than ten nanometers in size, with an impressive beam-spot diameter of just two nanometers. Visibly impressed by Director Dwayne Kirk's EBL analogy; "Consider a single strand of hair, sliced into ten thousand pieces, our EBL system is capable of resolving and etching these features onto just one of these slices.



*Above (from left): Federal Minister for Isaacs, Mark Dreyfus Q.C. M.P., MCN Director Dwayne Kirk, Tony Lupton Professor for Innovation and Public Policy at Monash University, and Professor Rod Hill, Pro-Vice Chancellor for Industry Engagement and Commercialisation pass by the MCN flagship Electron Beam Lithography tool.*



*Above (from left): MCN Director Dwayne Kirk, Federal Minister for Bruce Alan Griffin M.P., Federal Minister for Chisholm Anna Burke M.P., Federal Minister for Isaacs Mark Dreyfus Q.C. M.P., Radha Thomas of Industry Engagement and Commercialisation, Monash University, Tony Lupton Professor for Innovation and Public Policy at Monash University, and Professor Rod Hill, Pro-Vice Chancellor for Industry Engagement and Commercialisation.*

Pausing by the facilities aptly named 'glove box', the ministers were impressed by the encased atomic layer deposition and thermal evaporator systems' ingenuity, capable of completely fabricating components, such as solar cells, within a single inert bench-top environment.

The delegates also expressed an appreciation for the work conducted throughout the sites' extensive Biological and Chemical Laboratories, particularly the current drug delivery projects aimed to improve therapeutic methods of targeting cancer cells, without eradicating healthy cells; a frequent consequence from conventional treatments.

Concluding with another MCN flagship piece of equipment, the Focused Ion Beam's SEM, ability to generate a simultaneous cross section and view of just 20nm, captured the crowd's attention, inspiring discussion regarding the future of Nanotechnology as a viable entity within Australia's innovation future.

At the end of the visit, the guests left the MCN with a new appreciation of the MCN's innovative technologies and its strong overlap with Australia's national research priorities.

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