

Cuba and China: Lessons and Opportunities for the United States

**Commissioned report for the CubaInfo Series
The Cuban Research Institute
Florida International University
June 2009**



About the author

Dr. Adrian H. Hearn is a research fellow at the School of Social and Political Sciences, the University of Sydney. He has conducted research in Cuba (three years) and China (ten months), and is currently undertaking a study of Chinese engagement with Latin America. He is author of *Cuba: Religion, Social Capital, and Development* (Duke University Press 2008), *China and Latin America: The Social Foundations of a Global Alliance* (Duke University Press, forthcoming) and editor of *Cultura, Tradición, y Comunidad: Perspectivas sobre el Desarrollo y Participación en Cuba* (Imagen Contemporánea and UNESCO Center for Human Development 2008).

Acknowledgements

I thank the Australian Research Council, the University of Sydney, and the University of San Francisco for supporting this research, and am grateful for the feedback offered at the 2008 conference of the Association for the Study of the Cuban Economy (ASCE) on an earlier version of this paper.

Cuba and China: Lessons and Opportunities for the United States

“Have no friends not equal to yourself” - Confucius

By conventional rankings China is Cuba’s second largest trading partner and Cuba is China’s 10th in Latin America, but the significance of the relationship extends beyond the \$2.7 billion of annual trade between them, and beyond convention. For China, Cuba represents an opportunity to trial bilateral industrial initiatives that are carefully supervised from the top down, incrementally developed, and strategically integrated into a broad plan of commercial engagement. The details of this plan are not stated in any public declaration or official report, but Chinese firms have gone a step beyond the efforts of companies from Russia, Spain, the United Kingdom, and the United States to expand export markets for specific products, and a step ahead of state-run enterprises from Venezuela and Bolivia in developing human resource exchange programs. Combining free-market commerce with neo-socialist forms of resource bartering, China has advanced an all-encompassing approach trade and development with Cuba through a framework of intergovernmental cooperation.

As the Obama administration explores avenues toward rapprochement with Cuba, China’s industrial collaboration with the island harbors both lessons for establishing partnerships and opportunities to advance trilateral cooperation. Drawing on data gathered during three years of research in Cuba and ten months in China, this report discusses two key components of Sino-Cuban interaction: political dialogue as a precursor to commercial integration; and the development of coordinated, incremental approaches to market expansion and technology transfer. I conclude by arguing that a combination of multilateral and bilateral bridges to Cuba would encourage more open and transparent modes of information sharing, and allow U.S. firms to assess potential strategies for engaging with existing Sino-Cuban projects.

Diplomatic Engagement and the State

Bilateral trade between Latin America and China skyrocketed from \$10 billion in 2000 to over \$143 billion in 2008 (Xinhua 2009), and the Chinese government’s recent “Policy Paper on Latin America and the Caribbean” signals its interest in deepening “harmonious” relations with the region (Xinhua 2008). State-to-state international engagement, an integral component of the so-called “Beijing Consensus”, is attractive to the Latin American left in part because of its inherent endorsement of national sovereignty and state-coordinated development. In 1960 Cuba became the first Latin American country to recognize the People’s Republic of China (PRC), and despite the tensions produced by the Sino-Soviet split, their shared commitment to state supremacy for half a century has provided fertile ground for cooperation.

Chinese enterprises have developed a broad range of industrial initiatives in Cuba. Agricultural cooperation has focused on the production of rice, soy, sorghum, and maize, and Cuba exports 400,000 tonnes of raw sugar annually to China. Scientific exchange has developed in earthquake detection, solar energy research, cancer treatment, and vaccine production. In 2004, Hu Jintao pledged to invest \$500 million in Cuba's nickel sector, and although Venezuela emerged as the leading financier of the Las Camariocas ferro-nickel plant, China has since consumed 20,000 tons of the resource (Cheng 2009:1). The Chinese oil company Sinopec has teamed up with Cuba's CUPET to develop onshore operations in Pinar del Rio (CRS 2008:24), while the China National Petroleum Corporation (CNPC) is negotiating exploration of Cuban deposits in the Gulf of Mexico. In 2007, 10,000 Chinese tourists visited Cuba, and as discussed below, electronics manufacturing and transport infrastructure have emerged as key areas of expansion.

China often pays for developing country natural resources with trade credits, construction equipment, infrastructure upgrading, and technical training rather than hard currency (Robles 2005). The significance of such exchanges does not lie in their capacity to generate short-term commerce, but rather in the more encompassing goal of building stable alliances, political trust, and economic growth over the long term. This is facilitated by direct collaboration between the Cuban and Chinese governments, whose state-owned enterprises do not duplicate, undercut, or compete with each other. Even China's more strictly commercial goals in Cuba, such as filling Cuban homes and stores with Chinese electronic appliances, have been accomplished in close collaboration with the Cuban state.

Cuban officials argue that the state is more capable than the market of developing human capital and protecting the social commitments of the health and education systems. Chinese officials are familiar with the role of public services in building the legitimacy of the state, and have designed collaborative industrial projects in Cuba that outwardly emphasize a combination of cultural, economic, and social outcomes. The Chinese government's awareness of Cuban political culture is an integral element of its commercial success in Cuba, while by contrast, as Eusebio Leal has said, "we'll never allow McDonald's to hang its billboards in Old Havana" (interview, 29 April 2002). During Hu Jintao's visit to Havana in November 2008, the headline of the newspaper *Granma* read, "Example of Transparency and Pacific Cooperation" (Granma International 2008:1). Adopting a similar tone, Chinese officials maintain that their objective in Cuba and Latin America is mutually beneficial economic partnership and "south-south cooperation" (Jiang 2008, Robles 2005, Yang 2008). Diplomatic engagement with Cuban political culture has clearly advanced China's commercial goals.

While some analysts identify state leadership in developing countries as an integral and valuable component of "alliance capitalism" (Dunning 1997), critics argue that state-led industrial models, such as those advocated by Cuba and China, threaten human rights and democratic governance (CLATF 2006, Eisenman 2006, Lam 2004, Santoli et al. 2004). In his testimony before the House Committee on International Relations in April 2005, U.S. Congressman Dan Burton warned that, "Beijing's influence could easily unravel the region's hard-won, U.S.-backed reforms to fight against corruption, human rights abuses, increase government transparency and combat intellectual property violations" (Burton 2005:7). Similarly, Joshua

Kurlantzick argues that poor transparency has enabled China to develop partnerships with countries that are hostile to the United States while maintaining privacy from international rights and monitoring agencies (2008:199). Given the political climate in Washington, an opportunity exists for the United States to engage with both sides of this debate, and to assert a regional policy that enables more genuine forms of information sharing, responds to local needs, and sustains geopolitical balance. As the Congressional Research Service has advised, the United States should “work harder to ensure that U.S. democratization and human rights values are not seen by other countries as encumbrances and prohibitions placed in the way of, but instead as things that ultimately will improve, their economic progress” (CRS 2008:15). Given the political climate in Havana, Cuba is a logical starting point for advancing this policy. Its successful implementation, however, will require a more detailed awareness of the Cuban government’s approach to cooperation with foreign enterprises. Below I discuss two prominent aspects of bilateral engagement that have underpinned China’s industrial relations with Cuba.

Chinese Industry in Cuba: Incremental Growth and Coordinated Development

The products on display at the annual Havana trade fair demonstrate that U.S. companies seeking to operate in Cuba will enter a market already occupied by foreign competitors. For almost a decade, the fair’s white goods pavilion has been dominated by Haier, Huawei, ZTE, and other Chinese electronics firms, whose promotional literature proudly links them to the Chinese government, for instance:

China Putian Corporation was founded in 1980. It is an extra-large sized state-owned enterprise directly under the management of [the] Chinese central government...China Putian Corporation will regard Cuba as a platform so as to develop its business in Latin America.

Huawei is developing broadband internet services to Cuban government specifications, and Chinese manufacturers have integrated themselves neatly into Cuba’s “energy revolution” campaign, which seeks to reduce electricity consumption through the mass distribution of energy-efficient refrigerators, light bulbs, and domestic appliances. They have also participated in long-term technology transfer schemes that aim to progress from initial sales of Chinese products to their eventual manufacture in Cuba. An early example of this emerged two years into the Special Period, when China shipped 500,000 bicycles to Cuba. To meet continuing demand, Mao Xianglin, a former envoy of the Central Committee of the Chinese Communist Party, visited Cuba in 1997 to study the domestic economy and set up a bicycle factory with Chinese capital and technical expertise. The success of the initiative led to a similar export-to-production scheme for electric fans. Mao described this as an “incremental” strategy that Chinese businesses have since employed across a range of sectors in Cuba and Latin America:

I would hesitate to say that our Cuban manufacturing operations are entirely commercial, because what we’re doing is broader than that. We’re trying to help Cuba to incrementally upgrade its technical ability. If our products prove popular and useful then we assist by setting up factories...It is interesting that China learned from the United States how to manage its economy, and now Latin America

looks to China as a teacher of socialism. Today we are a global village, but for the village to be harmonious there has to be mutual understanding and respect. That is why we are helping Cuba to reach its goals...Using Chinese expertise Cuba could come to produce electronic goods for sale to Latin America (interview, 14 December 2007).

Chinese technical and financial assistance to Cuba demonstrate the sincerity of these words. During a 2001 visit to Cuba, Chinese President Jiang Zemin offered an interest-free credit line of \$6.5 million, a loan of \$200 million to modernize local telecommunications with Chinese products, and a \$150 million credit to buy Chinese televisions (Erikson and Minson 2006:14). Following the successful sale of Chinese washing machines, televisions, air conditioners, and refrigerators to Cuba, Hu Jintao signed sixteen accords in 2004 pledging Chinese support for the domestic manufacture of these and other goods, a promise that has materialized in a three-story production facility next to Havana's Lenin Park. Visiting again in November 2008, Hu offered extensions on the repayment of previous loans, a donation of \$8 million for hurricane relief, and a credit of \$70 million for health infrastructure. A Chinese businessman accompanying the delegation noted that 37 new investment projects offered by Hu will require Chinese technicians, investors, and their families to take up residence in Cuba, and will attract additional Chinese professionals to the country over time (interview, 21 November 2008).

In return for Chinese technology transfer, Raúl Castro has provided a domestic market for Chinese exports and, as Cheng Yinghong notes, has attempted to implement certain aspects of a revised "Chinese model" of local economic reform (Cheng 2009:1). Beyond the distribution of Chinese televisions and refrigerators through state channels, Raúl's April 2008 lifting of restrictions on the domestic sale of VCRs, mobile phones, computers, and other electronic items was an important building block of China-Cuba commercial relations. This reform also permits closer regulation of trade in products that were already widely in circulation through informal channels, reflecting William Ratliff's (2004:35) observation that Chinese-inspired economic reforms in Cuba may require more rigorous anti-corruption measures. The interests of Chinese electronics firms in Cuba, alongside those of Orascom from Egypt, and VimpelCom and Rostelecom from Russia, make electrodomestics a likely area of manufacturing expansion.

China's incremental approach to market expansion in Cuba is one component of a broader strategy of development that has proven successful across East Asia (Hira 2007:87-96). A related component of this strategy that has generated opportunities for Chinese firms in Cuba is the linkage of distinct industrial sectors into an integrated system, a process that analysts argue has given the Chinese government an unusual degree of control over production chains in a number of countries (Ellis 2005:5, Kurlantzick 2008:200). As Kurlantzick puts it,

The Chinese government wants to control the entire process, from taking commodities out of the ground to shipping them back to China, because it does not trust world markets to ensure continuous supplies of key resources. It is purchasing stakes in important oil and gas firms abroad, constructing the infrastructure necessary to get those

industries' resources to port, and building close relations with refiners and shippers (2008:200).

While China's investments in host country infrastructure and transport may deepen its control over the production process, it is important to note that this comprehensive approach to overseas logistical and technical development also carries local benefits. This is evident in the Cuban transport sector. 500 Chinese freight and passenger train carriages are being integrated into Cuba's rail fleet, with 21 complete locomotives scheduled to commence service in 2009. In 2008 the Chinese firm Yutong sold 1,000 energy efficient busses to the island, 200 of which were in circulation by mid-year. According to Rosa Oliveras of the Group of the Integrated Development of the Capital (GDIC),

When the Special Period hit us the vehicles and spare parts we had imported from the Soviet Bloc fell out of production, and our transport system was so damaged that the mobility of Havana's citizens was reduced to between 20 and 30 percent. Until recently people had to wait at bus stops for two or three hours and were forced to work half days, and sometimes not at all. We couldn't have carried on like this. The Chinese busses have saved our city, and actually the whole country, from a very grave situation (interview, 18 November 2008).

Together with the hardware, Yutong has sent a team of 30 Chinese technicians to teach their Cuban counterparts how to build the busses. As with training in electrodomeotics, this kind of human capital development will provide a valuable source of specialized talent as Cuba integrates into the world economy.

When President Hu Jintao visited Cuba in 2004 and 2008, his public speeches focused squarely on human capital development. The prior, delivered at Cuba's leading IT training facility, the Universidad de Ciencias Informáticas (University of Information Science), noted that thousands of the computers on campus came at subsidized prices from China, with the express purpose of advancing Cuba's IT capacities. The latter speech, delivered at the Tarará Student City, confirmed China's intention to send 5,000 students to Cuba by 2011 to create a sustainable bilateral platform for technical cooperation. The recruitment of Chinese technicians to live in Cuba to supervise and train the local workforce in 37 new Chinese investment projects will advance this goal.

The integration of infrastructure upgrading with IT and electronics training lays the foundation of a coordinated industrial chain that supports domestic manufacturing, the shipment of goods to markets around Cuba, and potentially to neighboring Latin American and Caribbean countries. Facilitated by the refurbishment of Cuba's ports with Chinese equipment (see Frank 2006), this strategy could significantly advance China's regional trade capacities. As former Cuban ambassador to China, Mauro García Triana, put it,

The Chinese are very clear about one thing: they're not going to be benefactors for Cuba like the Soviets were. I was once told in no uncertain terms by a Chinese diplomat: "Our relations with Cuba have

to be mutually beneficial or they will not work” (interview, 11 January 2007).

The incremental growth and coordinated development of industrial sectors on this scale require long time horizons and careful planning. It is logical therefore that in East Asia, where such strategies have succeeded, and in Latin America, where Chinese firms are looking to extend them, the institutional capacities of the State—particularly in the early stages of implementation—have proven valuable (Devlin 2008:129). This reality poses both obstacles and opportunities for U.S. lawmakers and entrepreneurs as they explore avenues of cooperation with Cuba. I conclude by suggesting that a key challenge for U.S. policy toward Cuba will be to show awareness of such programs while demonstrating the benefits that dialogue, openness, and transparency can bring.

Conclusion: Lessons and Opportunities for the United States

As U.S. firms weather the recession and adapt to a global economic environment skeptical of short-term investments, partnerships with Cuba could offer some stable and constructive solutions. In March 2009 the Obama administration approved wider legal channels for U.S. agricultural and medical exports to Cuba under the Omnibus Appropriations Measure (P.L. 111-8), providing a foundation for future industrial engagement. Likely next steps could include the authorization of trade in farm equipment, medical apparatus, and telecommunications products, niches that have already benefited from Chinese trade credits. Such steps would permit U.S. firms to compete and collaborate with Chinese counterparts in Cuba, and as indicated by several recent legislative proposals in Congress, would advance U.S. strategic interests if extended to the oil sector.

It is generally acknowledged that the U.S. embargo on Cuba has not achieved its economic or political goals. Even Cuban dissidents received the 2006 report of the Commission for a Free Cuba with skepticism, criticizing it for “presuming what a Cuban transition must be”, and affirming that “only we Cubans, of our own volition...can decide issues of such singular importance” (quoted in Sullivan 2009:20). A greater awareness of local socio-political dynamics in Cuba is sorely needed, and would be achieved by closer contact both at the interpersonal level, a prospect favored by 55.2 percent of Cuban Americans (FIU 2007), and through more interactive and coordinated commercial relations. Since 2002 the United States has been Cuba’s largest food supplier, and in the wake of hurricanes Gustav and Ike in September 2008, the Cuban government expressed its readiness for deeper trade relations (Sullivan 2009:24). Rather than dismiss this prospect on political grounds, economic openings and industrial coordination could be used to promote democratic outcomes. As the Inter-American Dialogue has concluded, “a democratic society in Cuba should be the objective of U.S. engagement, not a precondition” (IAD 2009:10).

A policy outlook that engages Cuba as a stakeholder in the prevailing world system would advance negotiations and resolutions on long-contended political disputes. Encouraging rather than impeding Cuba’s participation in the Organization of American States and other multilateral institutions would be welcomed in the region (IAD 2009:10), and would encourage much-needed multilateral dialogue on human rights, transparency, and sovereignty. This would also build international familiarity

with the Cuban government's industrial partnerships with China, economic objectives, and methods of calculating trade figures, which include social services not included in standard U.N. measures of economic output. Furthermore, multilateral engagement would widen opportunities for cultural exchange, academic forums, and NGO access, which together would build a more realistic picture of local priorities, needs, and opportunities for building community welfare capacities. This process, in Marifeli Pérez-Stable's terms, would enable Havana and Washington "to formulate a 'new beginning' with words that do not prune the dialogue before it can blossom" (2009; also see Colvin 2008:30-31).

Similarly, China's increasing participation in international multilateral institutions, such as the Caribbean Development Bank (CDB), the East Asia-Latin American Cooperation Forum (FOCALAE), and the Inter-American Development Bank (IDB) has engendered clearer understandings of its intentions in Latin America. China's 2008 accession to the IDB with an initial investment of \$350 million has extended its influence in Latin America by augmenting its capacity to bid for regional projects, but it has also subjected Chinese enterprises to IDB mechanisms for monitoring transparency and follow-through. This and other multilateral forums provide constructive channels for open discussion about environmental impact, human rights, and corporate responsibility (CFR 2007:97, CRS 2008:9-10).

For the United States, the value added by the above process lies in its promotion of trilateral cooperation. Both China and the United States favor more open markets in Cuba, and considering the attempts of Chinese enterprises to build Cuba's export capacities and develop its transport, manufacturing, and resource sectors, the United States is a logical source of management services and marketing expertise. Building on existing U.S. activities in agriculture, medicine, and telecommunications, expansion into these sectors would bring both economic benefits for U.S. firms and opportunities for harmonizing approaches to governance and information sharing. Indeed, the Obama administration's relatively conciliatory stance toward Cuba could lay the foundation of a much-needed "mutually reinforcing diplomacy" with China in the region (Wilder 2009:4).

A defining challenge for U.S. foreign policy in the 21st century will be the development of mutually beneficial partnerships with China. With sensible diplomacy, Chinese projects in Latin America could become a source of deeper cooperation, for as Daniel Erikson concisely put it to the House Committee on Foreign Affairs, "trade is not a zero sum game" (2008:3). Hu Jintao's proposal at the 2009 G-20 to jointly develop financial monitoring mechanisms reflects China's desire for cooperative relations with the United States. With legal authorization, Cuba could become a platform for advancing responsibly governed trilateral projects that demonstrate awareness of regional diversity and a commitment to international cooperation. Accommodating diversity is critical to effective diplomacy, for although Confucius may have stated, "have no friends not equal to yourself", in his pragmatic wisdom he also taught his followers to be "firm in the right way, and not merely firm."

References

- Burton, Dan (2005) "Opening Statement," China's influence in the Western Hemisphere, Subcommittee on the Western Hemisphere, Committee on International Relations, U.S. House of Representatives, 6th April, <http://internationalrelations.house.gov/archives/109/bur040605.pdf>
- CFR (Council on Foreign Relations) (2007) *U.S.-China Relations, An Affirmative Agenda, a Responsible Course*, Washington: Council on Foreign Relations, www.cfr.org/publication/12985/
- Cheng, Yinghong (2009) "Beijing and Havana: Political Fraternity and Economic Patronage", *The China Brief* 9(9), 30th April, p.1.
- CLATF (China-Latin America Task Force) (2006) *Findings and Recommendations of the China-Latin America Task Force, March-June 2006*, Miami: The University of Miami Center for Hemispheric Policy.
- Colvin, Jake (2008) "The Case for a New Cuba Policy", commissioned report, Washington, D.C.: New Ideas Fund, http://usaengage.nonprofitsoapbox.com/storage/usaengage//colvin_thecaseforanewcubapolicy_final.pdf
- CRS (Congressional Research Service) (2008), *China's Foreign Policy and "Soft Power" in South America, Asia, and Africa*, Committee on Foreign Relations of the United States Senate, www.fas.org/irp/congress/2008_rpt/crs-china.pdf
- Devlin, Robert (2008) "China's Economic Rise", in Riorden Roett and Guadalupe Paz (eds.), *China's Expansion into the Western Hemisphere: Implications for Latin America and the United States*, Washington, D.C.: Brookings Institutions Press, pp.111-147.
- Dunning, John H., ed. (1997) *Alliance Capitalism and Global Business*, New York: Routledge.
- Eisenman, Joshua (2006) "More progress in Latin America; Jitters over U.S.-Japan strategic cooperation", *China Reform Monitor* 613, Washington, D.C.: American Foreign Policy Council.
- Ellis, R. Evans (2005) *U.S. National Security Implications of Chinese Involvement in Latin America*, Carlisle, PA: Strategic Studies Institute, www.strategicstudiesinstitute.army.mil/pdf/PUB606.pdf
- Erikson, Daniel P. (2008) "The New Challenge: China and the Western Hemisphere", Testimony before the House Committee on Foreign Affairs, Subcommittee on the Western Hemisphere, 11th June, <http://foreignaffairs.house.gov/110/eri061108.htm>
- Erikson, Daniel P. and Adam Minson (2006) "China and Cuba: The New Face of an Old Relationship", *Hemisphere* #17, 22nd September, pp.12-15.
- FIU (Florida International University) (2007) "2007 Cuba Poll", Institute for Public Opinion Research and the Cuban Research Institute, Miami: Florida International University, www.fiu.edu/~ipor/cuba8/
- Frank, Marc (2006) "Trade with China primes Cuba's engine for change", *The Financial Times*, 7th March.
- Granma International (2008) "Example of transparency and Pacific cooperation", editorial, 23rd November, p.1
- Hira, Anil (2007) *An East Asian Model for Latin American Success*, London: Ashgate.
- IAD (Inter-American Dialogue) (2009) *Report of the Sol M. Linowitz Forum*, Washington, D.C.: Inter-American Dialogue.

Jiang, Shixue (2008) "The Chinese Foreign Policy Perspective", in Riorden Roett and Guadalupe Paz (eds.), *China's Expansion into the Western Hemisphere: Implications for Latin America and the United States*, Washington, D.C.: Brookings Institutions Press, pp.27-43.

Kurlantzick, Joshua (2008) "China's Growing Influence in Southeast Asia", in Riorden Roett and Guadalupe Paz (eds.), *China's Expansion into the Western Hemisphere: Implications for Latin America and the United States*, Washington, D.C.: Brookings Institutions Press, pp.193-212.

Lam, Willy (2004) "China's Encroachment on America's Backyard", *The China Brief* 4(23), 24th November, pp.1-3.

Pérez-Stable, Marifeli (2009) "Atajar el antagonismo perpetuo", *Encuentro en la Red*, 15th May, www.cubaencuentro.com/es/opinion/articulos/atajar-el-antagonismo-perpetuo-178054

Ratliff, William (2004) "China's 'Lessons' for Cuba's Transition?", Cuba Transition Project, the Institute for Cuban and Cuban American Studies, University of Miami, http://ctp.iccas.miami.edu/Research_Studies/WRatliff.pdf

Robles, Frances (2005) "From The Far East", *The Miami Herald*, 24 the December, p.1c.

Santoli, Al, Miki Scheidel, and Lisa Marie Shanks (2004) "Beijing uses a 'weiqi' strategy in the Americas; U.S. officials accept Chinese riot police in Haiti", *China Reform Monitor* 562, Washington, D.C.: American Foreign Policy Council.

Sullivan, Mark P. (2009) "Cuba: Issues for the 111th Congress", Congressional Research Service, 14th April, <http://ftp.fas.org/sgp/crs/row/R40193.pdf>

Wilder, Dennis (2009) "The U.S.-China Strategic and Economic Dialogue: Continuity and Change in Obama's China Policy", *The China Brief* 9(10), 15th May, pp.4-7.

Xinhua (2008) "Full Text: China's Policy Paper on Latin America and the Caribbean", *Xinhua Online*, 5th November, http://news.xinhuanet.com/english/2008-11/05/content_10351493.htm

Xinhua (2009) "Chinese VP talks about bilateral ties, cooperation, common development in Venezuela", *Xinhua Online*, 19th February, http://news.xinhuanet.com/english/2009-02/19/content_10844919.htm

Yang, Zhimin (2008) "Technological and Cultural Exchanges: Tightening the Link between China and Latin America", paper presented at the symposium *China and Latin America: The New Face of South-South Cooperation*, the University of Technology Sydney, 3rd December, <http://datasearch2.uts.edu.au/crc/events/event-details.cfm?ItemId=12758&ItemDate=2008-12-03>