

Jeremy Daniel Lease

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Objective

To attain an Engineering or Research & Development position that offers mobility, challenge and opportunities for personal growth.

Education

3/2002 - 7/2008: National University of Singapore (NUS), Singapore

- I obtained my PhD in the Department of Chemical and Biomolecular Engineering at NUS. My topic of research was entitled "Carbohydrate-Centered PAMAM Dendrimers for Use in Growing Liver Cells." This included a wide range of organic, polymer and carbohydrate chemistries, as well as surface modification and gelation reactions.
- I had first-hand experience in numerous analytical techniques such as MALDI-TOF-MS, FTIR, NMR, GPC, TGA and flash chromatography.
- I also had experience in basic cell culture techniques, cell viability and functional assays as well as with working in a clean room environment.

7/2000 - 12/2001: UIUC/NUS Joint Master's Program

- Master's Degree; GPA: 3.58/4.00
- This was a joint program between the University of Illinois@Urbana-Champaign (UIUC) and NUS. Time was spent equally between universities, involving both coursework and industrial internships.

8/1996 - 5/2000: UIUC, Urbana-Champaign, Illinois

- Bachelor's Degree; GPA: 3.05/4.00
 - I received my bachelor's degree in chemical engineering from UIUC in May of 2000.
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Work History

Job Title: Research Fellow/Program Manager

Company: Minerals Metals and Materials Technology Centre (M3TC)

Period: Dec 2007 - Present

Job Description:

- I am currently working in Singapore at an academic research centre, M3TC, focusing on natural resource technologies and innovation (www.m3tc.sg). I am extensively involved in technology management, including meeting with potential industrial and academic partners for R&D collaboration and review of project proposals. I also provide support in research related collaboration activities and assist in marketing capabilities as well as

lab-based research works to benefit industrial partners and associates. I have been involved in a number of industrial/research projects in such areas as coal, iron ore and soil. In early 2011, I took on the role of Program Manager, working with the Centre Director to ensure all research programs are administered appropriately and efficiently and assisting to oversee office operations and administration staff.

Job Title: Internship

Company: DuPont

Period: Dec 2000 - Aug 2001

Job Description:

- My first internship was at DuPont's Singapore location (Dec 2000 - April 2001). I evaluated pressure relief valves throughout the facility to ensure they were up to code and also performed process modeling on new full scale crystallization units.
- The second internship was in Orange, Texas (May 2001 - August 2001). Here I performed process modeling on some pilot plant operations using Aspen Plus simulation software.

Selected Publications

- Jeremy Daniel LEASE, Jayaker SOWPATI, Joshua VM KUMA and Jiangyong HU, Characterization and Feasibility Comparison of Different Natural Iron Sands (NIS) for Application in NOM Removal in Drinking Water Treatment, presented at: *The 3rd Regional Conference on Natural Resources and Materials Engineering*, Langkawi, Malaysia, 25-26 October, 2010.
- Jayaker SOWPATI, Zhaoxuan ZHANG, Jiangyong HU and Jeremy Daniel LEASE, Feasibility Study of Natural Iron Sand (NIS) Application in Drinking Water Treatment for NOM Removal, presented at: *19th Joint KKNN Symposium on Environmental Engineering*, Kyoto, Japan, 27-30 June, 2010.
- Jeremy Daniel LEASE and TONG Yen Wah, Carbohydrate-centered PAMAM Dendrimers for Growing Liver Cells, presented at: 2004 Annual Meeting AIChE, Austin, TX, USA, 2004.

References

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