

Unicamp, TU Delft and BE-Basic conclude first joint course on biobased economy business development

During the course 4 student teams successfully developed a business plan for the production of a biochemical which serves as a sustainable building block for several commonly used chemicals. Both academic and industrial lecturers provided input for the different aspects of a business plan such as technology, business strategy, sustainability, finance, legislation and communication.

With the presentation of the business plans at UNICAMP (Brazil) on November 5th, 2013, the first edition of the post-graduate course *Biobased-economy Beyond Bioethanol* came to a successful end. The course was offered by the Faculty of Chemical Engineering at UNICAMP and developed jointly with Dutch partners Delft University of Technology (TU Delft) and BE-Basic.

This course aims to link science and technology development, and translate this into a business goal and business plan including a realistic understanding of market potential and finances. The advances in biobased production technology are connected to sustainable process design with principles of new business development.

The 15 enrolled students, with different academic backgrounds, were divided into four multidisciplinary groups. Each group worked on the real-life case of 3-HPA production, using the context of the current Brazilian sugar cane industry. The final presentation of the business plans was evaluated by a panel representing the academic, investor and industrial point of view.



Although all groups did a very good job, the group composed of students Felipe Beato, Igor Silva, Jorge Silva Neto e Ricardo Oliveira received an award for best business plan. This group produced a very complete business plan for their hypothetical company, targeting the Brazilian acrylic acid market with a 3-HPA production facility and detailed downstream & upstream chain integration.

What makes this course extra special, besides the focus on business development and the international collaboration, is the fact that several lectures were given by speakers from industry: Braskem, Corbion Purac and AZKO Nobel. Braskem also participated in the examination panel and provided a special reward for the best business plan.

Given the positive feedback from everybody involved, the course coordinators prof. Gustavo Paim Valença (FEQ/Unicamp) and prof. Luuk van der Wielen (TU Delft, BE-Basic) plan to offer this *Beyond Bioethanol* course again in the second half of 2014.