

**BUSINESS ROUNDTABLE**  
**“ACCELERATING COMMERCIALIZATION IN BIOTECHNOLOGY”**

Wednesday, 5 May 2010  
11.00 am – 12.15 pm

**Room CC 11 B, Hyatt McCormick Regency Hotel,  
McCormick Place Chicago, IL USA.**



**Company Profile**

MGM INGREDIENTS AG is a subsidiary of the Swiss Panadero Group established in 1992. Panadero is a research-driven company, known for actively developing and implementing pioneering innovations for the international food industry. Over the years the company has built-up a business portfolio of natural food ingredients with particular emphasis on the application of food biotechnology.

The in-depth understanding of the interactions between food components, biochemical reactions and the beneficial use of microorganisms and enzymes in fermentation systems allow the Panadero team to develop further exciting environmentally friendly solutions to the food industry.

MGM INGREDIENTS is the holder of unique Intellectual Property (IP) that allows the manufacturing of natural ingredients for the food industry in particular for the bakery sector based on agricultural crop-residues or by-products. Their flag-ship concept is called PANATURA®.

MGM INGREDIENTS is open to exploring collaborations with leading companies in the United States and rest of the world to further develop the economic potential of its technologies

MGM INGREDIENTS is a private held company.

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**Brief Introduction of capability and track record**

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The in-depth understanding of the interactions between food components, biochemical reactions and the beneficial use of microorganisms and enzymes in fermentation systems allow Panadoro's team to develop further exciting environmentally friendly solutions to the food industry. MGM Ingredients is the holder of unique Intellectual Property (IP) that allows the manufacturing of natural ingredients for the food industry in particular for the bakery sector based on agricultural crop-residues or by-products. Today their flag-ship concept is called PANATURA®.

**Significant achievement and discovery in area of expertise**

The invention of Panatura occurred in 2002 and is best described as natural starter dough for yeast-raised products using solid state fermentation system and selected microorganisms that has all the quality attributes of a high quality artisan bread making system. It makes bread not only flavourful, moist and durable – it also lowers the cost of production. Panatura only uses the crop residues or by-products of the grain instead of chemicals.

MGM Ingredients, in conjunction with its strategic partner, the Interflour Group headquartered in Singapore, constructed the world's first and only production facility for Panatura in Kuala Lumpur Malaysia. Since it began operation in 2008, the production of Panatura has reached full capacity. MGM Ingredients is now working with BiotechCorp to establish a more sophisticated production and R&D facility in the Iskandar zone of Malaysia, to build upon the success of Panatura and to make Malaysia the global centre of these pioneering food biotechnology products'

Panadoro and MGM Ingredients have numerous other specialised food ingredients utilising crop residues and food biotechnology in the pipeline, which will be manufactured and commercialised through our proposed new plant in the Iskandar Biotech Park in Malaysia

**Progress update on collaboration with BiotechCorp**

MGM Ingredients has signed a MOA with Bio-Xcell, a joint venture between Biotech Corporation and UEM Land, to construct the world's largest production of its kind. MGM Ingredients and Bio-Xcell has been jointly working on this only since February 2010, and the speed and efficiency of Bio-Xcell to get to this MOA stage is very impressive by world standards. We hope to continue this over the next 6 months so that we can begin construction of the new facility by November 2010.

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The next stage with Bio-Xcell is to finalise all of the commercial and legal agreements to the satisfaction of both parties. Based on the good relationship to date, we believe this will be a constructive and positive negotiation process. The good relationship that we have developed with the BiotechCorp and Bio-Xcell team will ensure that this special project will be a success.

**Challenges to achieving desired results in Malaysia**

Food biotechnology is a capital intensive business that requires up front investment in the R&D and production. Also food biotechnology has a lengthy “to market” phase, where the products need to be marketed carefully to food manufacturers and processors, who are cautious about changing their current practices.

MGM Ingredients seeks the support of BiotechCorp to alleviate the infrastructure costs such as land and buildings. This can be done with long term loans at competitive interest rates, and by ensuring that there are adequate infrastructure services such as electricity, roadways etc. MGM does not seek handouts from Malaysia. Our requirement is for support during the first 5 years which is commercially the most difficult period for food biotech companies;

In the past, Malaysia has been slower than other countries to attract Biotechnology companies. Other countries such as Singapore, Vietnam, and Indonesia are also strong in their focus on the Biotechnology industries. However since the introduction of the 9<sup>th</sup> Economic Plan, Malaysia has become more competitive in attracting food biotechnology companies. MGM looks forward to being one of the first food biotechnology companies to demonstrate that Malaysia and BiotechCorp is now a world class location and partner.

Biotechnology is a precise and complex technology. Commercialisation of Biotechnological products need specialised infrastructure and support. The Iskandar Biotechnology Park is a clear demonstration on the understanding of the BiotechCorp on these needs. Working with a specialised developer UEM and close collaboration with the target industries allow the project to be user friendly, ensuring smooth transition from pilot scale to large scale manufacturing and commercialisation.

The additional support in terms of centralised utilities and trained human resource need are key factors in the success of any industry. BiotechCorp has recognised these needs and have developed programs to support Biotech industry in these areas.

**Contribution in preparing Malaysian biotech for commercialization**

MGM’s expertise and that of the Panadoro Group in general, is to commercialize Intellectual Property in food biotechnology. The key is to have the business processes and management in place that can take the innovative products and concepts to the market place on a global scale. MGM has already demonstrated its world wide reach, and the vision is to have Malaysian products based on Swiss technology being exported to Europe, the Americas, Middle East, Africa and the Asia Pacific rim.

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A key part of our proposal and discussions with BiotechCorp is the establishment of a world class R&D facility dedicated to food biotechnology. We will provide employment opportunities for the best of Malaysia's graduates in food biotech, in a commercial environment. This will develop the next generation of Malaysia's business leaders and entrepreneurs in this field.

The world class R&D facilities will provide opportunities for local scientists to work together with MGM in developing new products using local raw material. The R&D centre will also allow Malaysian scientists to network with other centres of excellence in their quest to develop new innovative solutions for the food industry. The vast network of Panadoro and MGM Biotech in Europe, Australia, USA and Canada allow for technical exchange.

**The next big thing in biotech**

The world needs to produce 100% more food by 2050, if we are to feed everyone. Food biotechnology is the most vital key to achieving this goal. Food biotechnology needs to take existing, natural by products of many of our food manufacturing systems, and deliver nutritional and clean-label food products that enable sustainable growth.

New innovation food manufacturing and processing systems with minimum waste will be of interest. Ability to improve nutritional quality of food through the use of biotechnology e.g. selection, use of new raw material, improvement of bioavailability through fermentation technology

Reduction in the usage of chemical additives and the need for natural alternative

**Global perspective on standards and best practices**

Food biotechnology is dynamic, with innovation of new standards and best practices ongoing. Europe and Nth America are the current centres of this innovation. MGM is an example of this. However, these best practices and standards can easily be transferred to developing economies that have good infrastructure, stable political and economic factors and educated and inspirational people. The partnership between MGM and Malaysia's BiotechCorp will be a great example of this.

There is a great emphasis on food safety, health and manufacturing standards. It is important for Malaysia to be in sync with global trends and best practice to ensure that Malaysian products find their place in the market place. Fundamental technology and manufacturing activities must be in line with the changing more stringent global standards and practices.