



STAFF PROFILE

Dr Rosiana Lestiani

Testing & Service Manager, the newly created role within the BioProcessing Advanced Manufacturing Initiative (BAMI):



I received my Bachelor of Engineering (Chemical Engineering) & Master of Engineering Management from RMIT University. In 2010, I joined Monash University to undertake a PhD which I completed in May 2015.

My PhD research was focused on investigating the dynamics of linting during offset printing of newsprint. I collaborated with Norske Skog Boyer in Tasmania, to develop an optical imaging and analysis system to measure the lint migration from the paper or the printing blanket. The lint camera system is able to provide better correlation between paper measurements and the linting performance of paper products. The study will allow paper manufacturers and printers to better understand linting process and to optimise their operations.

At BAMI, my role is Testing & Service Manager. I am in charge of managing the contract testing and projects related to process optimisation or product development, from BAMI/BioPRIA member industries. I need to ensure that the assigned projects are finished within the agreed timeframes.

This role is very exciting because it challenges me to uncover the hidden potential that BioPRIA has. BioPRIA tests available are not widely recognised in the industry. As part of my responsibilities, I will perform an audit, identify BioPRIA's testing capabilities and publicise these services to the industries. With the services that BioPRIA has to offer, the collaboration between industry and academia will be strengthened and we can also add value by providing solutions to the industries.



CONFERENCE HIGHLIGHTS

OCT 29 – NOV 1: 9th International Paper and Coating Chemistry Symposium, International Paper and Physics Conference—Tokyo, Japan

Dr Warren Batchelor and Dr Vikram Singh Raghuwanshi (one of BAMI's two post-doctorate research fellows), attended and presented three papers.

Whilst at the conference, Dr Raghuwanshi learnt "new aspects and innovations on cellulose based materials, including fundamentals and applied contribution of paper types from wood fibres".

NOV 11 : Symposium at the Appita Conference, Melbourne

Review by Zhiyong He, who attended several seminars in various sessions

The 2015 Appita Fibre Value Chain Conference & Expo was held in conjunction with the Pulp and Paper Industry Health and Safety Conference. The Appita Conference provided opportunity for Australian suppliers, researchers like us and mill personnel to reach and network with key industry stakeholders.

The conference delivered a diverse program featuring several streams such as health, safety & environment, bio products symposium, technical session and mill optimisation. In the health, safety & environment session, I heard interesting talks given by a number of safety representatives from different companies, such as Markham Williams & Associates Ltd, Australia Paper Maryvale, and etc. These talks gave me a basic understanding of the importance of health and safety in the workplace.

The BioProduct symposium session explored the important issues relating to advancing the capabilities of a fast growing forest fibre sector. It helped raise awareness of technologies and innovations to push the industry forward. As a representative from BioPRIA, I presented my work in oil/water separation by cellulose aerogel in this session, and received positive feedbacks and constructive advice from the audience.

In the technical session, information regarding the recent research advances in the field were shared mostly by researchers coming from universities, and R&D departments of several companies.



Norske Skog



PAPER MAKING FOR A BETTER WORLD.

2015 BAMI Research Highlights:

The following two articles were published in the Journal of Colloid and Interface Science:

Raj, P., Varanasi, S., Batchelor, W.J., Garnier, G., 2015, Effect of cationic polyacrylamide on the processing and properties of nanocellulose films, Journal of Colloid and Interface Science [P], vol 447, Academic Press, Maryland Heights MO USA, pp. 113-119.

Su, J., Garvey, C.J., Holt, S.A., Tabor, R.F., Winther-Jensen, B., Batchelor, W.J., Garnier, G., 2015, Adsorption of cationic polyacrylamide at the cellulose-liquid interface: a neutron reflectometry study, Journal of Colloid and Interface Science [P], vol 448, Academic Press, Maryland Heights USA, pp. 88-99.

A comprehensive list of 2015 journal publications and links to full articles can be found at the BAMI website via www.biopria.com.au/index.php/bami-home.



BAMI TEAM BUILDING / SOCIAL

ACTIVITIES

Those at BAMI are no strangers to teamwork, an essential component of scientific research. Staff and students have also taken opportunities to collaborate socially, throughout the year:

JULY: Netball

Team HAPPI played netball in the Monash games for the second year in a row and although they missed out on a place in the finals but noticeably improved from last year :-)



[l-r] Thilina, Windy, Natasha, Praveena, Uthpala, Ruoyang, Zhihong, Scot, Junfei and Janette

OCT/NOV: The Monash 10,000 Steps Challenge 2015: Let's Explore Italy

Two APPI teams of eight participated in this Monash-wide virtual walk across Italy, from Naples to Prato, with the Cellulose Nano-steps declaring victory over the Garlic Sea Walkers. Xue Zhang completed the most number of steps in APPI, with a total of 590,928 steps.

OCT/NOV: Chemical Engineering Postgraduate Association (CEPA)

Two BAMI students, Praveena Raj and Zhiyong He, won 1st and 2nd places respectively for their oral presentations at the 5th Annual Chemical Engineering Conference. CEPA recently staged a trivia night and the team from BAMI tested their general knowledge against fellow chemical engineering postgraduates to a packed house.

BAMI Student Chapter

Student Pramod Sripada presented for the final student chapter presentation for the year which was followed with a Christmas luncheon.