

## Avances en biomateriales forestales en Canadá: la experiencia de FPInnovations

Jimmy Jong<sup>4</sup>

### FPInnovations

FPInnovations es una organización sin fin de lucro de alcance internacional, especializada en la generación de soluciones científicas innovadoras para respaldar la competitividad del sector forestal canadiense y para responder a las demandas prioritarias de sus miembros y de sus socios gubernamentales.

Cuenta con una posición ideal para el desempeño en el estado del arte de la investigación, el desarrollo de tecnologías de avanzada y la entrega de soluciones innovadoras a problemas complejos para cada área de la cadena de valor, desde las operaciones forestales hasta el consumidor y los productos industriales.

Su equipo humano incluye más de 525 integrantes. Sus laboratorios de Investigación &Desarrollo están ubicados en Montreal, Ciudad de Quebec y Vancouver y dispone de oficinas de transferencia de tecnología a través de todo el país.

Los programas de investigación abarcan desde operaciones forestales, lucha contra incendios, primera y segunda transformaciones de la madera, sistemas avanzados de construcción hasta biomateriales, biorefinería y energía entre otros. El objetivo del programa de biomateriales es el desarrollo de productos madereros no tradicionales para el aprovechamiento del valor de todos los componentes de los recursos naturales, incluyendo los residuos, lo cual permite diversificar los mercados de la madera y favorecer el desarrollo de la nueva bioeconomía. El programa de biorefinería y energía desarrolla canales para la obtención de bioproductos químicos y bioenergía a partir de la madera, enfatizando la integración con la infraestructura ya existente de la industria forestal. (Fuente: Página Web FPInnovations; traducción al español Zohra Bennadji).

### Jimmy Jong: C.V. (fuente: Jimmy Jong)

**Jimmy Jong**, currently an Interim Research Manager for the Cellulosic Biomaterial Program at FPInnovations.

He was previously a Research Leader for Biomaterials manufacturing group. He received his B.Eng. (1991) from Concordia University, a M.A.Sc. (1993) and a Ph.D. (1998) from the University of Toronto in the Department of Mechanical Engineering in Canada. His PhD thesis topic covered the experimental and theoretical investigation of drainage behavior in a twin-wire roll forming paper machine.

He also worked for Institute of Paper Science and Technology in Atlanta, USA between 1998-2001 as an Associate Engineer. His main responsibilities were to carry out research activities in applying non-contact ultrasonic measurements for key paper properties and process improvement including implementation at a paper mill.

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He joined FPInnovations (formerly Pulp and Paper Research institute of Canada - PAPRICAN) in 2001 as a research engineer. His papermaking expertise has grown through management of several research projects to provide scientific and innovative solutions to operational optimization in paper machine process such as headbox, forming, pressing, and how certain paper making practices can influence key paper properties and sheet structure such as formation, strength & stretch, porosity, dimensional stability, z-directional fines & filler structures, linting, etc. He has also been actively involved for the development of tissue expertise at FPInnovations including the conversion of pilot paper machine to pilot tissue machine and managing several tissue making research projects.

His current role involves the development and application of new cellulosic biomaterials such as Cellulose Filament in pulp and paper mills.

He has published over 40 papers in scientific journals and conference proceedings, and made numerous presentations at international conferences. He has given many lectures in papermaking areas both at FPInnovations to external clients and through PAPTAC as a form of online lecture.

He also served as a chairman of Tappi Fulid Mechanics Committee in 2008-2010, and served on Tappi Engineering Division Council from 2011-2012. He has chaired many technical sessions at Tappi Papermaking conferences and other international conferences. He has also peer-reviewed numerous manuscripts for technical journals such as JPPS and J-FOR and Technical Information Sheet for Tappi.