

KTAPPI International Interview

CTP and Korea: Advancing the Future of the Pulp and Paper Industry Together

Journal of Korea TAPPI conducted a two-part interview with the French research institute CTP (Centre Technique du Papier), which has maintained a long-standing partnership with Korea. CTP scientists have contributed significantly to the advancement of the Korean pulp and paper industry by visiting Korea each year to deliver technical seminars. The first interview was conducted in person with two CTP scientists who participated in a seminar organized by the Changgang Institute of Paper Science and Technology last autumn. Subsequently, Professor Jeong-Yong Ryu of Kangwon National University, who also serves as Vice President of Korea TAPPI, visited CTP in France and conducted a face-to-face interview with Gilles Lenon, who is responsible for the institute's overall operations. Through these two interviews, the journal explored CTP's research activities and operational strategies as a leading institute in pulp and paper research, while also discussing opportunities for fostering stronger collaboration and mutual growth with the Korean paper industry.

J. Korea TAPPI: Thank you for taking the time to interview with the Journal of Korea TAPPI. First, could you please introduce yourself?



“CTP supports the industry in its transformation towards sustainability, innovation, and competitiveness.”

Gilles Lenon: My name is Gilles Lenon, and I am the Director of the Centre Technique du Papier (CTP). I have the privilege of leading this institution, whose mission is to support the industry in its transformation towards sustainability, innovation, and competitiveness.



Fabienne Vercelli: My name is Fabienne Vercelli, after graduated from Paper Engineer School at Pagora and completed a Ph. D., I worked for a major chemical supplier of the pulp and paper industry as sales and support engineer for seven years. I am now leading the customer relations team at CTP since 2007.

Benjamin Fabry: I am Benjamin Fabry, after graduating from Paper Engineer School at Grenoble, I started a Ph. D. study in 1996 at CTP. I then joined the Center as project manager and now scientific advisor within eco-efficient processes team.

J. Korea TAPPI: Although CTP is a well-known research center to J. Korea TAPPI readers, I would still like you to introduce it. Please introduce when it was founded, its current activities, and its personnel structure, etc.

Gilles Lenon: CTP is a French Technical Center serving the pulp, paper, and board industry since 1957, when it

was created by the national paper producers. For nearly 70 years, CTP has remained faithful to its mission: supporting industrial players worldwide in developing high-performance, sustainable, and recyclable fibrous materials. Over the decades, we have built strong expertise, scientific know-how, pilot facilities, and specialized laboratories covering the entire value chain of the industry. Today, CTP plays a central role by providing R&D services, expertise, training, and technology transfer, with a particular focus on eco-design, decarbonization, and the circular economy. We also maintain close ties with French paper mills, supporting them in their development and modernization while ensuring strong connections with international partners.

J. Korea TAPPI: There are several renowned paper research institutes in Europe, but could you introduce the research areas in which CTP has strengths?

“CTP dedicates 100% to the pulp and paper industry.”

Gilles Lenon: CTP is among the very few research institutes in the world dedicated 100% to the pulp and paper industry. Our expertise is organized around five Divisions of Excellence. The first three, Biobased Materials, Functional Products, and Eco-Efficient Processes, are recognized for their pioneering research in areas such as bleaching, refining, and barrier functionalities. For example, the chromatogeny process enables the development of grease- and water-resistant papers while preserving recyclability and compostability, and wet lamination allows us to develop fully cellulosic high-barrier papers. The two other divisions provide transversal expertise and laboratory services that support the entire institute. This integrated organization allows us to deliver complete solutions to our partners, from research to industrial application.

Fabienne Vercelli: The strength of CTP lies in its capacity to transform an industrial need or question into a



full project. We integrate all the necessary phases, from laboratory studies to pilot trials and industrial demonstrations, thanks to the wide and complementary expertise of our teams.

J. Korea TAPPI: The sustainable operation of a research institute requires stable financial support. How does CTP secure the funding necessary to sustain its research activities?

Gilles Lenon: CTP's resources are diversified. Around 60% of our budget comes directly from industrial partners who support our research and request private technical assistance. About 25% is provided by the French government through a tax applied to national pulp and paper producers, ensuring long-term stability of our mission of public service. The remaining 15% comes from competitive public funding, at both national and

European levels, through collaborative research projects. This balanced financial model guarantees both independence and a strong alignment with the expectations of industry and public authorities.

J. Korea TAPPI: It seems difficult to explain the relationship between CTP and Korea without Professor Ryu Jeong-Yong. How did Professor Ryu get connected with CTP and maintain a good cooperative relationship?

“Friendly partnership with CTP has been maintained for 27 years. And I hope this will continue for many years to come.”

Ryu Jeong-Yong: The relationship with CTP goes back many years. In 1997, when I was working in the Pulp and Paper Laboratory at the Korea Research Institute of Chemical Technology (KRICT) in Daedeok Science Town, Korea was struck by the Asian financial crisis (commonly referred to as the IMF crisis in Korea). This significantly weakened our research capabilities and made it increasingly difficult for KRICT to carry out contract research with Korean paper companies. At that time, a management concept known as the “Tarzan Management Theory” was widely discussed as a strategy for corporate survival. Among its various ideas, I was particularly inspired by the notion that “when Tarzan faces difficulties, he calls out and his powerful friends in the jungle come to his aid.” Rather than spending years trying to rebuild every missing capability on our own, I believed it would be far more effective to leverage the strengths of outstanding international partners and focus on transferring the technologies we had developed to the industry. I first approached CTP in late 1999. Because



CTP had developed considerable expertise in recycled paper technology, it was an ideal partner for collaboration. Around the same time, the Korea Institute of Industrial Technology (KITECH) launched a “Cleaner Production Technology Diagnosis and Consulting Project” involving approximately ten Korean recycled paper mills. CTP and KRICT participated in the project as a joint team, and this opportunity provided us with a good chance to collaborate. After that, the international collaboration with CTP continued through the KRICT-KTAPPI Round Table Meetings, which were held ten times. Even after I moved to Kangwon National University in 2013, our partnership continued without interruption.

J. Korea TAPPI: Korea and CTP have maintained a special relationship for a long time. Please tell us about the relationship so far.

Fabienne Vercelli: The collaboration started in 1999 with Gérard Galland, who led CTP’s Recycling and Deinking activities, together with Professor Ryu. Initially, the exchanges focused on deinking and recycling, through seminars and collaborative projects. When the deinking market began to decline due to machine closures and conversions, our cooperation shifted naturally towards packaging, which has become a key area of international collaboration.

Benjamin Fabry: My first contact with Korea was at a round table organized by Professor Ryu in Daejeon, about 20 years ago. Since then, I have regularly welcomed Korean researchers to CTP’s Forum, especially on deinking and recycling. We also developed reciprocal support to the Korean paper industry, whether through pilot trials at CTP’s facilities in Grenoble or by providing technical support directly on site in Korea.

J. Korea TAPPI: Could you please tell us about one or two non-academic memories that were most memorable to you during your visit to Korea?

Fabienne Vercelli: One of my best memories is my first chicken barbecue at the KTAPPI Forum with the CPIST-KNU students, which remains for me a moment of friendship and exchange. Another memory, that I can qualify of special instead of best, was the very special experience of tasting ammonia fish. It is always a pleasure discovering new cultures and new foods.

Benjamin Fabry: During my first visits, I remember an anecdote: I had back pain after intensive sports practice. Professor Ryu had to see a doctor and took me with him to a traditional Korean doctor. I ended up with needles in my feet and cupping on my back. When I came out, my back had never felt so good, despite the brown marks on my back that lasted for about a month.



Gilles Lenon: I particularly remember visiting the Gyeongbokgung Royal Palace, which offered a remarkable insight into how life was organized in the 14th century. I was deeply impressed by the serenity and atmosphere of this historical place.

J. Korea TAPPI: There are many topics of interest to the paper industry, such as research to improve the performance of paper to the level of replacing plastics or

research to promote recycling. Please introduce CTP's research trends in this regard.

“Developing new fiber-based materials to replace plastics is one of the key research activities.”

Gilles Lenon: In order to anticipate technological transitions, we have developed several strategic roadmaps. These roadmaps, aligned with our Performance Contract signed with the French Ministry, define priority research and development themes. Eight of them are directly dedicated to developing new fiber-based materials to replace plastics and to advancing recycling and recyclability. Each roadmap identifies key impacts, bottlenecks, and challenges, and enables us to implement multi-annual programs ranging from exploratory research to pre-industrial maturity.

Fabienne Vercelli: Currently, we are putting strong emphasis on the industrialization of chromatogeny technology. It has already received approval for food contact in paper and board coated with PVOH and grafted with chromatogeny, opening up new market opportunities. Another promising development is the lamination of microfibrillated cellulose (MFC), which aims to achieve fully cellulosic barrier solutions.

Benjamin Fabry: In my field, new regulations are pushing for greater incorporation of recycled fibers in packaging. Our research focuses on the quality of sorted materials and their impact on recycling processes, in particular the possibility of using recycled fibers in paper and board for food contact applications. We are also developing new 3D cellulose-based materials, such as molded cellulose and cellulose foams.

J. Korea TAPPI: To what extent does CTP conduct joint research and development with overseas companies?

Gilles Lenon: CTP is internationally recognized and participates in numerous collaborative projects involving European and overseas companies. Our partners are located on every continent. Joint research is a powerful way to pool resources and combine complementary expertise for a common goal. Even though papermaking has centuries of history, our industry must constantly innovate to meet market demands, regulatory requirements, and sustainability goals, which is why cooperative work at the international level is essential for sharing knowledge and transferring innovations to industry, thereby fulfilling our mission of value creation.

J. Korea TAPPI: What procedures should Korean paper companies go through to participate in research and development with CTP?



“We hope to have even greater collaboration with Korean companies in the future.”

Gilles Lenon: For Korean companies wishing to engage with CTP, we recommend building on the existing academic and institutional partnerships as entry points. Once the initial connection is made, our teams can define tailored projects, ranging from laboratory studies to industrial-scale trials, ensuring that the cooperation is both efficient and sustainable. We are committed to fostering long-term partnerships that provide concrete benefits to all parties involved.

Fabienne Vercelli: Due to the geographical distance and language barrier, the basis for collaboration often lies in partnerships such as the one we have developed with Professor Ryu. His team acts as a vital link between CTP and the Korean paper industry. Depending on requests and funding opportunities, we adapt the collaboration framework. The combination of our reciprocal expertise and the availability of CIPST’s facilities represents a solid foundation for supporting Korean pulp and paper companies.

J. Korea TAPPI: Before we wrap up this interview, Professor Ryu, would you like to share a few thoughts on CIPST’s vision for the future?

Ryu Jeong-Yong: Since 2013, CIPST has secured more than 8.5 billion KRW in R&D funding over the past decade. The greatest reason we have been able to remain dedicated to our research is that CTP has always stood by us as a reliable partner through international collaborative research, much like the jungle friends who come to Tarzan’s aid whenever he is in need. I would like to take this opportunity to express my sincere gratitude once again to all the researchers at CTP for your invaluable support. In recent years, particularly since 2023, the sharp reduction in the national science and technology R&D budget has created significant challenges for the operation of our institute. Nevertheless, thanks to the continued support of many paper companies, we have been able to sustain our research activities and preserve our research foundation. In return for this trust and support, the CIPST remains committed to conducting practical, industry-oriented research and development that closely addresses the needs of the paper industry.

J. Korea TAPPI: Thank you very much for your very informative interview with J. KTAPPI. I hope CTP and Korea paper industry keep working together in the future.

Interviewer: Hak Lae Lee, Editor-in-Chief of the J. of Korea TAPPI

