

# 目 次

## 叢說

Navigating the Energy-Quality Trade-Off of Refining Process in Stock Preparation: Fundamentals, Mechanisms, and Technological Advances in Refining (Part I) ..... 5  
 Chul-Hwan Kim

## 研究論文

Brand Design: Research on the Color Management of Printed Images on Tea Paper Packaging ..... 23  
 Xiaying Liu

Effect of Pulping Condition on Bamboo Pulp Properties in Glycol Ether-Based Organosolv Process ..... 31  
 Sa Rang Choi, Jiae Ryu, Jung Myoung Lee

Influence of Sizing Treatment on the Hydrophobicity and Strength Properties of Cellulose-Based Paper Materials for Liquid Packaging ..... 43  
 Hao Liu, Guihua Yang, Ming He, Shaoguang Wang, Qimeng Jiang, Chenyue Yu, Jiachuan Chen

수용액 내 메틸렌블루 제거를 위한 카르복시메틸셀룰로오스/그래핀옥사이드 복합 비즈 제조 및 흡착 거동 평가... 54  
 김재영, 권순완, 장대현, 김형진, 류재호, 이태주

백수 고형분의 나노피브릴화 및 이의 제지공정 적용 ..... 69  
 박승욱, 이건희, 이학명, 윤혜정

아민화 및 옥시프로필화를 통한 이중 기능화 리그닌 기반 고강도 하이드로겔의 네트워크 안정성 향상 ..... 82  
 김민수, 허지원, 김용식

건조 온도가 CMC/전분 기반 고흡수성 소재의 네트워크 구조 및 흡수·보수 특성에 미치는 영향 ..... 93  
 김하늘, 조병욱

중탄산나트륨 첨가에 따른 CMC/전분 기반 고흡수성 고분자의 염수 흡수 특성 향상 .....	102
신찬희, 김영래, 조병욱	

## 學會記事

금호의 제지인: 전통 위에 혁신을 더해, 지속가능한 미래로 — 한국제지연합회 최현수 회장 .....	113
KTAPPI 인터뷰: 2025년 추계학술대회 특별세션 발표자와 함께 .....	120
학회 소식 .....	127
회원 동정 .....	130
펄프·종이기술 투고 규정 및 원고작성 요령 .....	131
연구 및 출판 윤리 규정 .....	141

# CONTENTS

## Review

- Navigating the Energy-Quality Trade-Off of Refining Process in Stock Preparation: Fundamentals, Mechanisms, and Technological Advances in Refining (Part I) ..... 5  
Chul-Hwan Kim

## Originals

- Brand Design: Research on the Color Management of Printed Images on Tea Paper Packaging ..... 23  
Xiaying Liu
- Effect of Pulping Condition on Bamboo Pulp Properties in Glycol Ether-Based Organosolv Process ..... 31  
Sa Rang Choi, Jiae Ryu, Jung Myoung Lee
- Influence of Sizing Treatment on the Hydrophobicity and Strength Properties of Cellulose-Based Paper Materials for Liquid Packaging ..... 43  
Hao Liu, Guihua Yang, Ming He, Shaoguang Wang, Qimeng Jiang, Chenyue Yu, Jiachuan Chen
- Fabrication of Carboxymethyl Cellulose/Graphene Oxide Composite Beads and Evaluation of Their Adsorption Behavior for Efficient Removal of Methylene Blue from Aqueous Solutions ..... 54  
Jae-Young Kim, Soon Wan Kweon, Dae-Hyun Jang, Hyoung Jin Kim, Jae Ho Ryu, Tai Ju Lee
- Nanofibrillation of White Water Solids and Their Application to Papermaking Process ..... 69  
Seung-wook Park, Kunhee Lee, Hakmyoung Lee, Hye Jung Youn
- Dual-Functional Lignin via Amination and Oxypropylation for High-Strength Hydrogels with Enhanced Network Integrity ..... 82  
Min Soo Kim, Ji Won Heo, Yong Sik Kim

Effect of Drying Temperature on Network Structural and Absorption-Retention Properties of CMC/Starch-Based Superabsorbent Polymers .....	93
Ha-Neul Kim, Byoung-Uk Ch	
Enhancement of Saline Absorbency in CMC/Starch-Based Superabsorbent Polymers by Incorporation of Sodium Bicarbonate .....	102
Chan Hee Shin, Young Lae Kim, Byoung-Uk Cho	

## Transactions

KTAPPI Person of the Issue: Tradition Strengthened by Innovation: Charting a Sustainable Future — Korea Paper Association Chair Rita Choi .....	113
KTAPPI Interview: Trusted Partners of the Pulp and Paper Industry — 2025 Fall Conference Special Session: Trends and New Technologies in Papermaking Additive Chemicals .....	120
Association News .....	127
Membership .....	130
Guidelines for Authors .....	131
Ethical Guidelines for Research and Publication .....	141