International Symposium on Biorefining, Papermaking, and Lignocellulosic Materials 2022 (ISBPLM 2022)

April 26-28, 2023

Shaanxi University of Science & Technology, Xi'an, China

The Second Announcement

In view of the positive trends in the domestic and international epidemic prevention and control, the ISBPLM 2022 International Symposium is rescheduled to **April 26-28, 2023**.

The symposium are jointly organized by Shaanxi University of Science & Technology (SUST), South China University of Technology (SCUT), Tianjin University of Science & Technology (TUST), Nanjing Forestry University (NFU), Qilu University of Technology (QUT) and Guangxi University (GXU).

The symposium aims to promote and develop interdisciplinary collaborative research on the most advanced methods and technologies in papermaking and biorefining. We welcome scholars and researchers from all over the world to attend the symposium to share and exchange ideas face to face.

Your participation and contribution are of great importance to guarantee the success of the conference. You are cordially invited to attend this event. Please visit the symposium website later for more information: http://www.isbplm2022.com.

CALL FOR PAPERS

You are invited to submit your presentation to the Scientific Committee of the Symposium on the following topics:

Topics for ISBPLM 2022

- Plant fiber chemistry and new analytical methods
- Pulping and bleaching chemistry, high yield pulping, fiber recycling and non-wood pulping
- Papermaking chemistry and engineering, finishing, coating, and converting
- Equipment and process control on pulping, papermaking, and biorefinery
- Environmental issues in the pulp and paper industry
- Nanotechnology, nanofiber and nanocellulose-based functional materials

- Biomass conversion to fuels, chemicals, and materials
- Printing and graphics processing
- Special topic: flexible electronics based on biomass

TIMETABLE (DATES & DEADLINES)

- Abstracts (approx. 300 words) submitted — January 18 ~ February 20, 2023
- Acceptances notified — March 1, 2023
- Early-bird registration ends — February 10 ~ March 31, 2023
- Conference registration — April 26, 2023
- Main symposium — April 27-28, 2023

ORGANIZATION

Sponsored and Organized by:

Shaanxi Provincial Key Laboratory of Papermaking Technology and Specialty Paper Development, Shaanxi University of Science & Technology

State Key Laboratory of Pulp and Paper Engineering, South China University of Technology

Tianjin Key Laboratory of Pulp and Paper, Tianjin University of Science & Technology

Jiangsu Provincial Key Lab of Pulp and Paper Science and Technology, Nanjing Forestry University

State Key Laboratory of Biobased Material and Green Papermaking, Qilu University of Technology

Guangxi Key Lab of Clean Pulp & Papermaking and pollution Control, Guangxi University

Conference Chairman

Prof. Zhijian Li - Shaanxi University of Science & Technology, Xi'an, China

Co-Chairs

Prof. Meiyun Zhang - Shaanxi University of Science & Technology, Xi'an, China
Prof. Xiaohui Wang - South China University of Technology, Guangzhou, China
Prof. Zhong Liu - Tianjin University of Science & Technology, Tianjin, China,
Prof. Yongcan Jin - Nanjing Forestry University, Nanjing, China
Prof. Jiachuan Chen - Qilu University of Technology, Jinan, China
Prof. Chengrong Qin - Guangxi University, Nanning, China

Organizing Committee

Prof. Xinping Li (Chairman) - Shaanxi University of Science & Technology, China
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Prof. Douyong Min - Guangxi University, Nanning, China

FORMAT FOR THE ABSTRACT

The example below shows the format for preparing your abstract. Please prepare your abstract accordingly. You can add figures and tables.

NOTICES:

- Please submit your abstract through the website: http://www.isbplm2022.com.
- All accepted abstracts will be distributed to attendances as an electronic file at the ISBPLM 2022.
- English is the official language of the symposium. All abstract should be written in English.

REGISTRATION, FEES AND LOCARION OF THE SYMPOSIUM

- Official Website for Registration: http://www.isbplm2022.com.
- Symposium fee:

- Early-bird stage: 2200 CNY/person for official representatives and 1200 CNY/person for student representatives.
- Standard stage: 2500 CNY/person for official representatives and 1400 CNY/person for student representatives.

➢ Symposium Location：Courtyard by Marriott Xi'an North (in Chinese: 西安蓝海风万怡酒店); Hotel Address: 37 Fengcheng Second Road, Weiyang District, Xi'an, China

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A simple multi-wavelength spectroscopic method for the determination of carboxyl group content in nanocellulose (Times New Roman, 12 font, bold)

Ning Yan [1], Xin-Sheng Chai [2], Troy Runge [3*](Times New Roman, 10.5 font)

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(NOTES: Please replace the above title, author names, affiliations, and corresponding author's e- mail address with yours. Presenter's name should be underlined. Please delete these lines in red letters when you will have completed to prepare your abstract.)

ABSTRACT (Times New Roman, 10.5 font, bold): This study describes a multi-wavelength spectroscopic method for the determination of carboxyl group content of nanocellulose. Methylene blue (MB) was used as a color indicator, which can bind to the carboxyl groups in nanocellulose to form a R-COOMB complex with a binding ratio of 1:1, although the spectrums of MB and R-COOMB at 500 ~ 750 nm are overlapped, and solid impurities could cause spectral interference. To solve these issues, a multi-wavelength spectroscopic measurement on a MB and nanocellulose mixture solution technique and mathematical model were developed, allowing the content of carboxyl groups in nanocellulose to be quantified. The results showed that the method has good measurement precision and accuracy as compared with those measured by a reference method. The method is simple and requires only a small sample size for testing and thus makes it suitable for nanocellulose related research and applications. (Times New Roman, 10.5 font)

KEYWORDS (Times New Roman, 10.5 font, bold): Nanocellulose; Carboxyl group; Methylene blue; Multi-wavelength spectroscopy (Times New Roman, 10.5 font)

REFERENCES (Times New Roman, 9 font, bold)

[1] Dufresne A. Nanocellulose: from nature to high performance tailored materials. Walter de Gruyter GmbH & Co KG, 2017.

[2] Abitbol T., Rivkin A., Cao Y., et al., "Nanocellulose, a tiny fiber with huge applications", *Current Opinion in Biotechnology*, **39**, 76-88 (2016)

Liu C., Du H., Dong L., et al., "Properties of nanocelluloses and their application as rheology modifier in paper coating", *Industrial & Engineering Chemistry Research*, **56**, 8264-8273 (2017)