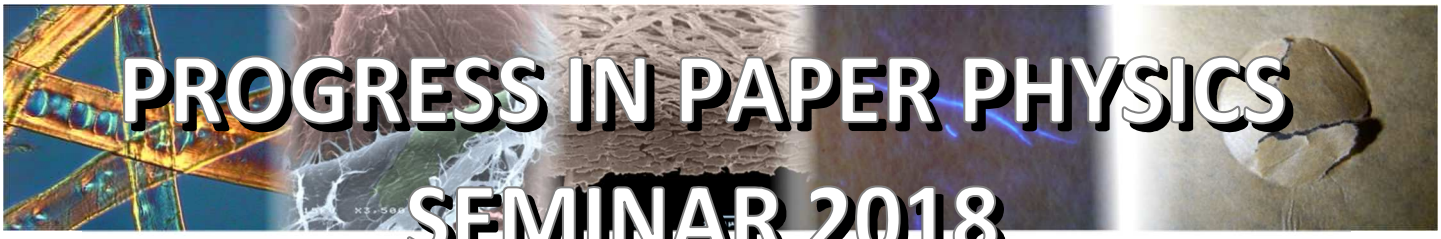

PROGRESS IN PAPER PHYSICS SEMINAR 2018

LODZ 23.09.2018 - 27.09.2018

DAY 1	23.09.2018	SUNDAY / NIEDZIELA
17^{00} - 20^{00}	Registration of Participants / Rejestracja Uczestników Lodz University of Technology, International Faculty of Engineering Zwirki 36, Lodz - CAMPUS A	

DAY 2	24.09.2018	MONDAY / PONIEDZIAŁEK
8^{00} - 16^{00}	Registration of Participants / Rejestracja Uczestników	
9^{00} - 9^{15}	OPENING AND WELCOME / POWITANIE UCZESTNIKÓW	
9^{15}	**Frugal Innovations with Paper through surface and Interface engineering** Stephanie Oyola-Reynoso, J.-F. BLOCH, Martin M. Thuo	
9^{45}	**Comparison of Wood and Non Wood Market Pulps for Tissue Application** Tiago de Assisa, Joel Pawlak, Hasan Jameel, Lokendra Pal, Ronalds Gonzalez	
10^{15}	**Dynamic Characterization of fluid sorption: application to paper and tissue** Konrad Olejnik, Jean-Francis Bloch, Paweł Pełczyński, Agnieszka Głowacka	
10^{45}	COFFEE BREAK / PRZERWA	
11^{15}	**Modelling the hygroexpansion of paper using a 3D network model** H.R. Motamedian and A. Kulachenko	
11^{45}	**Characterization of the heterogeneous specific stiffness of paperboard materials** Prof. Dr. D. Steven Keller, Dr. John M. Considine, Daniel Knettel M.S., Catherine Fitzgerald Andres, Jasmine Spicer	
12^{15}	**Increased Formability of Paperboard by Hydrostatic Pressure -** Philipp Stein, M. Sc.; Julian Mushövel, B. Sc.; Wilken Franke, M. Sc.; Prof. Dr.-Ing. Dipl.-Wirtsch.-Ing. Peter Groche	
12^{45}	LUNCH / OBIAD	
13^{30}	**Understanding the relationship between shrinkage and elongation of paper** Jarmo Kouko, PhD, Elias Retulainen DSc (Tech)	
14^{00}	**Development of Strains and Stresses during drying of Paper** Georg Urstöger, Artem Kulachenko, Ulrich Hirn	

14^{30}	How to improve the mechanical properties of recycled paper by noncovalent modification of fibres - Cristina Crespo (PhD), Pablo González (PhD), Gemma Ibarz (PhD), María Muniesa (MSc Chem), Alberto Mena (MSc Chem), Azucena González (MSc Chem)
15^{00}	Viscoelastic and hygroscopic properties of cellulosic materials investigated by atomic force microscopy methods Caterina Czibula, Christian Ganser, Robert Schennach, Ulrich Hirn, and Christian Teichert
$16^{30} – 19^{30}$	Guided tour of Lodz

DAY 3	25.09.2018	TUESDAY / WTOREK
9^{00}	Keynote Lecture:	
9^{45}	Panel Discussion: Is paper physics the irrelevant, ancient discipline?	
11^{00}	COFFEE BREAK / PRZERWA	
11^{30}	A fractured-based view of strength development in handsheets Douglas W. Coffin, Professor	
12^{00}	Failure initiation mechanisms of paper and board in compression August Brandberg, MSc. and Artem Kulachenko, PhD	
12^{30}	Continuum Modelling of the In-plane and Out-of-plane Behaviour of Paper based on Finite Strain Elasto-Plasticity Ahmad Alajami; Yujun Li, Dr; Abolhasan Nazarinezhad Giashi; Jaan-Willem Simon, Dr	
13^{00}	LUNCH / OBIAD	
14^{00}	Characterization of bursting energy absorption Konrad Olejnik, Anna Stanisławska, Jean-Francis Bloch, Anna Dryja	
14^{30}	Optimized procedure for the synthesis of dialcohol cellulose pulp and its thermomechanical properties Stefan Möckel, Martin Zahel, PhD and Tiemo Arndt, PhD	
15^{00}	3D Image-based Finite-Element Modelling of Deformation in Softwood Pulp: Effect of Refining Intensity Robert Cicoria, Farzin Golkhosh, Mark Martinez, André Phillion	
15^{30} - 15^{45}	Benchmark studies for the simulation of paperboard forming Malte Wallmeier	
15^{45} - 17^{00}	POSTER SLIDE PRESENTATIONS / SESJA PLAKATOWA	

18^{00} - 22^{00}	GALA DINNER (Browar Księży Młyn ul. Tymienieckiego 22/24, 90-349 Łódź)

DAY 4	26.09.2018	WEDNESDAY / ŚRODA
9^{00}	Z-Dimensional Local Compression of Paper Towel Structural Features Daniel Knettel M.S. and Prof. Dr. D. Steven Keller	
9^{30}	Highly oriented paper for paper based construction materials	

	R. Götzinger M.Sc., Prof. Dr.-Ing. S. Schabel
10^{00}	**The effects of fiber selection on the physical property of bath tissue paper** Yuhan Wang, Joel Pawlak, Ronalds Gonzalez
10^{30}	**COFFEE BREAK / PRZERWA**
11^{00}	**Using Representative Volume Elements for Evaluating the Out-of-plane Response of Fiber Networks** Yujun Li, Dr.; Zengzhi Yu; Jaan-Willem Simon, Dr.
11^{30}	**X-RAY nanotomography of individual fibre bonds - the effect of fibre wall thickness on contact area** T. Sormunen (MSc), A. Ketola (MSc), A. Miettinen (PhD), J. Parkkonen (MSc), E. Retulainen (DSc)
12^{00}	**Modified cellulose fibers for papermaking applications** Konrad Olejnik, Piotr Kulpiński, Marta Krysztof, Aleksandra Erdman
12^{30}	**LUNCH / OBIAD**
13^{30}	**Simulation of mechanical dewatering based on high resolution imaging and detailed material models** Timo Frick, Dr. Siegfried Graser, Bettina Grashof, Dr. Natalie Osti
14^{00}	**Degradation of mechanical properties of cardboard due to manufacturing and converting processes** Tomasz Garbowski, PhD
14^{30}	**Pore Space Extraction and Characterization of sack paper using µ-CT** Eduardo Machado Charry, Matthias Neumann, Jussi Lahti, Robert Schennach, Volker Schmidt, and Karin Zojer
15^{00} - 17^{00}	**Tappi Paper Physics Committee** / Posiedzenie

18^{00} - 21^{00}	**Concerto in Academy of Music in Lodz with refreshment / Koncert w Pałacu Akademii Muzycznej (Gdańska 32, 90-716 Łódź) wraz z poczęstunkiem**

DAY 5	27.09.2018	THURSDAY / CZWARTEK
9^{00}	**Cellulose-polyamide fibrous composites** Magdalena Kmiotek, Dariusz Danielewicz, Katarzyna Dybka-Stępień	
9^{30}	**The trojan-horse strategy for designing thermally self-repairing superhydrophobic barrier coatings on paper** M. Biesalski	
10^{00}	**Siloxane based hydrophobic paper coatings** Tomasz Ganicz, DSc., Konrad Olejnik, Dsc.; Krystyna Rózga-Wijas, PhD; Jan Kurjata, PhD.	
10^{30}	**Laboratory simulation of paper mechanical response during high-speed inkjet printing** Jussi Lahti, PhD; Jarmo Kouko, PhD; Ulrich Hirn, Assoc. Prof. PhD	
11^{00}	**Liquid penetration into paper** Sarah Krainer and Ulrich Hirn	

11^{30}	The mechanics of double roll compacting process Chiara Ceccato, Artem Kulachenko, Christophe Barbier
12^{00}	CONFERENCE CLOSE / ZAKOŃCZENIE KONFERENCJI, POŻEGNANIE UCZESTNIKÓW

POSTER LIST

Improvement of refining homogeneity
A. Biel-Tyralska, T. Tyralski

Nanofibrillated cellulose produced by enzymatic or chemical treatments combined with mechanical disintegration
C. Bilir

Properties of lightweight fibrous structures made by a foam Forming technique
S. Burke, M.E. Möbius, T. Hjelt, S. Hutzler

The influence of the primer on the physical-mechanical and printing properties of paper for inkjet printing
S. Havenko, S. Khadzhynova

Use of DIC-3D as a tool to study local strains and creep behaviour in a microscale for different cellulosic materials
E. Liarte, J.F García, P. González, C. Crespo

A simple route to antibacterial paper
D. Nunes, E. Fortunato, R. Martins, C. Kittinger, D. Toplitsch, R. Schennach

Modification of paper properties with polysiloxane microspheres
P. Pospiech, K. Olejnik, A. Wysocka-Robak, U. Mizerska, J. Zakrzewska

Superhydrophobic electroconductive cotton fabric with reduced graphene oxide
M. Svyntkivska, T. Makowski, E. Piorkowska, U. Mizerska, W. Fortuniak, D. Kowalczyk, S. Brzezinski