

POSTER SESSIONS

Poster Session #1 - Tuesday 12 October (15:30 – 17:00)

NCHEM / Novel chemistry

NCHEM #055 Influence of magnetic cork particles on the thermal properties of epoxy resin

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NCHEM #134 Polyurethane adhesives based on oxypropylated lignin via reaction with propylene carbonate

L. Antonino, G. Garcia, D. Dos Santos

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NCHEM #160 Free formaldehyde adhesive based on lignin-phenol-glyoxal resins for wood particleboards

A. Candela, M.V. Navarro, M.P. Muñoz

Technological Centre of Furniture and Wood of The Region of Murcia - Yecla (ES)

NCHEM #161 Eco-friendly adhesive based on sugar for wood particleboards

M. Muñoz Muñoz, M.V. Navarro Bañon, A. Candela Gil

Technical Centre of Furniture and Wood of Region of Murcia (CETEM) - Yecla (ES)

SOFT / Soft matter

~~**SOFT #058** Effects of kraft lignin incorporation on rheological behavior of a pressure sensitive adhesive~~

~~**canceled**~~

~~**R. Sousa Junior, G.E.S. Garcia, L.D. Antonino, A. Braga Santos, D.J. Carastan, D.J. Santos**~~

~~*Federal Univ. ABC - Santo André (BR)*~~

SOFT #103 Soft adhesives for barrier laminates - Implementation of a testing device and evaluation of ageing behaviour

L. Peham, M. Habegger, R. Pugstaller, G.M. Wallner.

Institute of Polymeric Materials and Testing, CDL-AGEPOL, Johannes Kepler Univ. Linz (AT)

SOFT #165 Numerical modelling of large stretch of adhesive fibrils

K. Patel^{1,2,3}, M. Ciccotti^{1,2,3}, E. Barthel^{1,2,3}

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SOFT #186 Surface characterization of an elastomeric composite of cornstarch and PDMS

T. Bhowmick, A. Ghatak

Indian Institute of Technology - Kanpur (IN)

SURF / Surfaces

- SURF #099** Vulcanization-bonding assisted by plasma
F. Poncin-Epaillard, M. Ji, L. Benyahia
IMMM - Le Mans (FR)
- SURF #106** Visualization of capillary phenomena at the origin of "framing effect" of liquid coatings
M. Delory^{1,2,3}, B. Chorein², A.C. Brulez², T. Fiorani³, N. Grosjean⁴, L. Mees⁴, S. Benayoun¹
¹ *Laboratoire de Tribologie et Dynamique des Systèmes (LTDS) - Écully (FR)*
² *ITECH - Ecully (FR)*
³ *FAURECIA - Méru (FR)*
⁴ *Laboratoire de Mécanique des Fluides et d'Acoustique (LMFA) - Écully (FR)*
- SURF #109** Numerical 3D wetting on textured surfaces through Lattice-Boltzmann method and comparison with experimental data
A. Epalle, V. Neyrand, Q. Legrand, M. Catherin, M. Cobian, S. Valette
LTDS - Laboratory of Tribology and Systems Dynamics - Écully (FR)
- SURF #135** Effect of lignin functionalization on the modification of polypropylene surface energy and adhesion properties
M. Patrício Da Silva Bisneto, J. Rocha Golveia, D. Jackson Dos Santos
Univ. Federal ABC (UFABC) - Santo André (BR)
- SURF #147** Effect of lignin acetylation on the mechanical properties of 3D-printed PLA/lignin blends parts
G. Saltarelli Garcia¹, J.R. Gouveia², D.J. Dos Santos³, R.M.B. Gomes⁴, A.B. Nascimento¹
Univ. Federal ABC (UFABC) - Santo André (BR)

TOOL / Novel tools

- TOOL #123** Challenges for the use of piezoresistive adhesives in anisotropic materials like timber
C. Winkler¹, A. Teischinger², A. Simon³, M. Jahreis¹, U. Schwarz¹
¹ *Eberswalde Univ. for Sustainable Development - Eberswalde (DE)*
² *Univ. of Natural Resources and Life Sciences - Vienna (AT)*
³ *Univ. of Applied Sciences - Erfurt (DE)*

Poster Session #2 – Wednesday 13 October (10:45 – 12:15)

BIOAD / Bioadhesion

- BIOAD #193** Design and investigation of proteins inspired by natural adhesive matrices
A. Benabdi, C. Vendrely, C. Picot
Cy Cergy Paris Univ., Cergy (FR)

BOND / Structural bonding

- BOND #094** Modelling the strength of adhesively bonded G-FRP tube connections
T. Vallée¹, M. Voss¹, M. Kaufmann¹, M. Albiez²
¹ *Fraunhofer Institute for Manufacturing Technology and Advanced Materials IFAM, - Bremen (DE)*
² *Karlsruher Institut für Technologie, Steel and Lightweight Structures - Karlsruhe (DE)*
- BOND #125** Flax and glass fibre reinforced PP composites: adhesion between PP and reinforcing fibres
M. Martínez Casanova¹, J. Abenojar Buendía^{1,2}, M. Bahrami¹, J.A. Butenegro García¹
¹ *In-Service Materials Performance Group, Univ. Carlos III - Madrid (ES)*
² *Mechanical Engineering Department, Univ. Pontificia Comillas - Madrid (ES)*
- BOND #128** Advanced compressive shear testing and in-situ failure analysis of glass-laminates
M. Tiefenthaler¹, R. Pugstaller¹, G.M. Wallner¹, F.R. Costa²
¹ *Institute of Polymeric Materials and Testing, CDL-AGEPOL, Johannes Kepler Univ. - Linz (AT)*
² *Borealis Ag - Linz (AT)*
- BOND #143** Adhesion improvement of PTFE tubes by atmospheric pressure plasma
J. Feng, S. Sihelník, A. Jamaati Kenari, R. Krumpolec
CEPLANT— R&D Center for Plasma and Nanotechnology Surface Modifications, Masaryk Univ. Brno (CZ)
- BOND #173** Beads deposition pattern optimization for pressurized bonded solar pannel application
J. Jumel, P. Guimaraes, M. Rouxel, A. Sarrade
ENSTA Bretagne-IRDLD - Brest (FR)

DURA / Durability

- DURA #034** Accelerating environmental ageing of adhesive aluminium joints by changing the specimen geometry
S. Golob^{1,2,3}, J. Holtmannspötter¹, M. Johlitz², M. Frauenhofer³, A. Lion²
¹ *Bundeswehr Research Institute for Materials, Fuels and Lubricants (WIWeB) - Erding (DE)*
² *Univ. Bundeswehr München - Neubiberg (DE)*
³ *Audi AG - Ingolstadt (DE)*
- DURA #104** Design of a test for thermo-oxidized adhesively bonded joints for aero-engines applications
J. Masson^{1,2}, M. Gigliotti¹, J.C. Grandidier¹, J. Delozanne², W. Albouy², N. Dagorn²
¹ *Institut Pprime, ISAE-ENSMA, Univ. Poitiers, Chasseneuil (FR)*
² *Safran Composites, Pôle Matériaux et Procédés, Itteville (FR)*
- DURA #108** Effect of curing time on fatigue crack growth kinetics of model electrical steel laminates
M. Ninou Codina, R. Pugstaller, G. Wallner
Institute of Polymeric Materials and Testing, Univ. Linz (JKU-IPMT), CDL-AGEPOL - Linz (AT)