



COST ACTION GREENERING – DATA COLLECTION

First name, Family Name: Dimitrina, Todorova

Type (Academic or Industrial): Academic

Country: Bulgaria

Leadership position in the COST: MC member

Working Group in which you are involved: WG1

E-mail: todorova.dimitrina@uctm.edu

Laboratory/Company: University of Chemical Technology and Metallurgy, Sofia, Bulgaria
Department of Cellulose, Paper and Graphic Art

Laboratory/Company info (limited to 400 characters): The University of Chemical Technology and Metallurgy (UCTM) is located in the capital of Bulgaria, Sofia, which is the largest industrial business and cultural centre in the country. The University was founded in 1953 and inherited the best traditions of the Bulgarian chemical higher education. Today UCTM is an educational and research centre with a strong reputation in training highly skilled specialists with career opportunities in industry, research and special fields in designing, operating, and managing various production methods and industrial enterprises. Every year UCTM trains about 3000 undergraduate and post-graduate students a number of whom come from Europe, Asia, Africa and Latin America. A total of 352 lecturers are engaged in teaching and research; more than half of them are professors and associate professors; 273 are doctors and doctor of science. Currently UCTM has 21 bilateral contracts included in the Institutional ERASMUS Contract which is the base of the sustainable development of the European dimension of the educational process.

Link to the home page of the Laboratory/Company: <https://uctm.edu/bg/>

Fields of expertise (limited to 400 characters):

- Papermaking chemistry and technology
- Paper and packaging properties
- Bio-based additives and materials in paper and packaging industry
- Reuse, recycling and conversion of secondary paper and packaging materials into new products
- Environmental applications of paper and packaging materials
- Structural design of packaging on EngView Packaging Suite CAD/CAM software.

5 Main publications or patents:

- S. Bencheva, D. Todorova, „Influence of low-molecular weight polyacrylamide over the properties of recycled printing paper”, Journal of University of Chemical Technology and Metallurgy, 46 (2), 2011, 127-130.
- D.A. Todorova, S.P. Bencheva, “Investigation on the influence of chemical additives over the behavior of paper furnish from recycled newspaper fiber material”, Bulgarian Chemical Communications, Vol. 47, Special issue A, 2015, 45-50



- S. A.Kotlarova, V.G.Lasheva, D. A.Todorova, “Ecological utilization of printed waste paper”, Bulgarian Chemical Communications, vol. 47, Special issue A, 2015, 34-39
- Kiril Dimitrov, Dimitrina Todorova, Sanchi Nenkova, Michael Herzog, “POLYCARBONATE DIOLS TO PRODUCE ELASTIC POLYURETHANE FOAMS – A METHOD OF IMMOBILIZATION OF CARBON DIOXIDE INTO A POLYMER STRUCTURE”, Journal of Chemical Technology and Metallurgy, 52, 1, 2017, 28-40
- U. Vrabic Brodnjak, D. Todorova, “Novel Packaging Paper Made From Blend Fillers of Chitosan and Rice Starch”, IOSR Journal of Polymer and Textile Engineering (IOSR-JPTE), e-ISSN: 2348-019X, p-ISSN: 2348-0181, Volume 4, Issue 3 (May. - June. 2017), PP 33-43, www.iosrjournals.org
- D. A. Todorova, P. M.Miladinova, V. N. Blyahovski „Dyeing of offset printing paper with new reactive dyes - influence over the paper properties and the ageing“, Bulgarian Chemical Communications, Volume 49, Special Issue L (pp.187-194) 2017
- D. A. Todorova, P. M.Miladinova, „Investigation on the influence of reactive dyes over the colour stability of offset printing paper during ageing“, Bulgarian Chemical Communications, Volume 49, Special issue L (pp.181-186) 2017
- Temenuzhka Radoykova, Sanchi Nenkova, Nelly Georgieva, Dimitrina Todorova, Tsvetelina Angelova, “IMPROVEMENT OF OPERATIONAL PROPERTIES OF WOOD MATERIALS BY MODIFICATION THROUGH THE PENETRATION METHOD”, 17th International Multidisciplinary Scientific GeoConference SGEM 2017, www.sgemviennagreen.org, SGEM2017 Vienna GREEN Conference Proceedings, ISBN 978-619-7408-29-4 / ISSN 1314-2704, 27 - 29 November, 2017, Vol. 17, Issue 63, 579-586 pp; DOI: 10.5593/sgem2017H/63/S26.073
- Urška Vrabč Brodnjak, Dimitrina Todorova, “CHITOSAN AND RICE STARCH FILMS AS PACKAGING MATERIALS”, 9th International symposium on graphic engineering and design, November 08-10, 2018, Novi Sad, Serbia, 275-280, DOI: <https://doi.org/10.24867/GRID-2018-p34>
- Dimitrina Todorova, Kiril Dimitrov, EFFECT OF MAGNETIC FIELD ON CELLULOSE REFINING PROCESS AND STRENGTH PROPERTIES, Journal of Chemical Technology and Metallurgy, 54, 5, 2019, 978-985
- Urška Vrabč Brodnjak, Dimitrina Todorova, Mirjam Leskovšek, VISCOELASTIC PROPERTIES OF PAPER FROM SOFTWOOD PULP WITH ADDITION OF CHITOSAN AND RICE STARCH, J-FOR Journal of Science & Technology for Forest Products and Processes: VOL.7, NO.6, 48-60, 2020
- J.K. Tanui, P.N. Kioni, T. Mirre, M. Nowitzki, D.A. Todorova, “Application of CFD-DEM Method in Modelling of Wood Combustion in a Fixed Bed”, Bulgarian Chemical Communications, Volume 52, Issue 3 (pp. 396-403) 2020 DOI: 10.34049/bcc.52.3.5270

Collaborations:

- Technical University of Applied Sciences, Wildau, Germany; Department of Engineering and Natural Sciences
- University of Ljubljana, Slovenia, Faculty of Natural Sciences and Engineering

Facilities:



- Hydrapulper for disintegrating secondary paper and packaging
- Paper sheet forming laboratory machine (Rapid-Kothen, Germany)
- Zwick/Roell material testing machine
- Paper and packaging testing laboratory