Tuesday 27, September 2011

17:00-19:00  Reception of Congress delegates
19:00  Official reception
Wednesday 28, September 2011

8:30-9:00 Opening Ceremony
9:00-9:45 Heidemann Lecture
A natural plant crosslinker from olive waste for leather tanning
Stefan Marx, Jens Zotzel, Heinz-Peter Germann, Stefan Banaszak
9:45-10:30 AEIEC Lecture
Study of the weathering variables on chrome-tanned leather ageing
Anna Bacardit, Montse Jorba, Joan Carles Castell, Joaquim Font, Luis Ollé
10:30-11:00 Coffee Break

SESSION 1. Oral lectures on: “Basic research in the tanning industry”
Chairman: Dr. Volkan Çandar & Prof. Jaume Cot

11:00-11:20 A1. Using collagen fiber as carrier and stabilizer to prepare heterogeneous palladium (Pd) nanoparticle catalyst and its hydrogenation of olefins
Hui Mao, Chen Chen, Xue-Pin Liao, Bi Shi
11:20-11:40 A2. Specific ion effects to explore the difference of chromium and aluminum salts in the stabilization of collagen
Lirong He, Changdao Mu, Sumei Cai, Wei Lin
11:40-12:00 A3. The quest for a comprehensive tanning mechanism
Eleanor M. Brown, Maryann M. Taylor, Cheng-Kung Liu
12:00-12:20 A5. Investigation of Red Stains on Wetblue Leather
Luis A. Zugno, Elton L. Hurlow
12:20-12:40 A7. Prediction in leather processing: a dark art or a clear possibility?
Anthony D. Covington
12:40-13:00 A8. Collagen stabilization using functionalized nanoparticles
Kalarical Janardhanan Sreeram, Marimuthu Nidhin, Selvam Sangeetha, Nishtar Nishat Fatima, Usha Ramamurthy and Balachandran Unni Nair
Jochen Amann, Volker Bach, Nora Haufe, Doreen Naumburger, Michael Mertig.
Kuilin Ye, Qiang Zeng
13:40-15:10 Working Lunch

SESSION 2. Visual displays on: “Basic research in the tanning industry”

15:10-16:40 A4. Adsolubilization studies on collagen fibres with 2-Naphtol as model substance
Agustí Marsal, Fernando Maldonado, Albert Mª Manich
A6. Collagenic biopolymer isolation from bovine hide for its use in medical applications
M. Catalina, J. Cot, P. Celma, A. Manich
A9. The Influences of Carboxyl Groups Content of Collagen on the Chromium (III) Absorption
Chunchun Xia, Zhaoyang Luo, Haojun Fan, Xin Chen, Bi Shi
A10. The importance of elastin distribution and morphology in ovine leather
Richard Edmonds, Sue Cooper
A13. Modification of collagen with a natural cross-linker, procyanidin
Lirong He, Changdao Mu, Jiabo Shi, Qian Zhang, Bi Shi, Wei Lin
A14. Raw hide quality
René Liauzon
A15. Mechanical Properties and Hydrophilicity of Gelatin and Poly (3-hydroxybutyrate-co-3-hydroxy-valerate) Blend Films
Ya Li, Lan Jiang, Kaiqi Shi, Jiali Lu, Jingkuan Duan, Shuangxi Shao
A16. Stabilization of Collagen with biotechnological Approaches
Ines Stachel, Winfried Schlögl, Wolfgang Friess, Georg Gübitz, Michael Meyer
A17. Dimensional and structural stability of leather under alternating climate conditions
Michaela Schröpfer, Michael Meyer
A18. Swelling behavior of gelatin-based hydrogel cross-linked with microbial transglutaminase
Deyi Zhu, Liqiang Jin, Yulu Wang, Haixia Ren
A19. Characterization of red deer skins
Gökhan Zengin, Urana Dandar, Selime Mentes Çolak, Remziye Deveci
A22. Thermal insulation studies on leather clothing: Relevance to structure–property relationship
Kaliappa Krishnaraj, Palanisamy Thanikaivelan, Perumal Singaraj SureshKumar, Ramasamyreddy Jagadeeswaran, Bangaru Chandrasekaran
A24. Vibroacoustic Characterization of Drumheads
Ali Maruf Alaskan, Bahri Başaran
A25. A novel approach to stabilize collagen analogs through L→D configurational changes
Punitha Velmurugan, Raghava Rao Jonnalagadda, Balachandran Unni Nair
A26. Extraction and Characterization of Collagen from Rabbit-skins
Keyong Tang, Fang Wang, Xuejing Zheng, Wenpo Feng, Ling Zhang
A27. Color prediction in wet leather – Mathematical modelling using linear regression
Malathy Jawahar, R. Venba, G. Jyothi, Swarna V Kanth, N K Chandrababu

Visual displays on “New developments in chemical products for the tanning industry”

D4. Combination Tanning Properties of Aluminum Salts and Amide Derivatives Prepared by Gallic Acid and Melamine
Xihuai Qiang, Yuan Feng, Hui Zhang
D6. Novel Natural Dyes for Eco-Friendly Leather Articles
Soriene Bordingnon, Mariliz Gutterres, Sérgio Knorr Velho, Wagner Fernando Fuck, Abel V. Schor, Miriam Cooper, Larissa Bresolin
D14. The significance of decorin, a minor proteoglycan of bovine hides, in improving the quality of leather
Mila Aldema Ramos, Cheng-Kung Liu  
D15. The Biodegradabilities of Different Oil-based Fatliquors  
Luo Zhaoyang, Xia Chunhun, Fan Haojun, Shi Bi, Peng Biyu  
D18. A theoretical study on the reactivity of phenols and aldehydes: prospect of formaldehyde-free syntans  
Yanan Wang, Wenhua Zhang, Shangzhi Pu, Xuepin Liao, Bi Shi  
D19. Study on influence of leather fatliquor on the biodegradation of dye  
Zheng Liwen, Li Yanchun, Liu Jie, Chen Yufeng  
D22. Study on synthesis and antibacterial property of polyamino chitosan derivates  
Luo Xiaomin, Wu Dongqiu, Xie Xing, Li Pengni, Ren Longfang  
D24. Anticalcification treatment of glutaraldehyde fixed bovine pericardium with modified hyaluronic acid  
Deyi Zhu, Liqiang Jin, Liu Tianqi, Wang Xuemei, Xu jing, Haixia Ren  
Sara Cuadros, MªAngels Manresa, Joaquim Font, Mª Elena Bautista, Fernando Maldonado, Agusti Marsal  
D32. Cool pigments for leather finishing  
Kalarical Janardhanan Sreeram, Radhika Sreenivasan, Aravindhan Rathinam, Balachandran Unni Nair  
D33. Effect of pH on the Phosphorous Components of Tetra-hydroxymethyl Phosphonium Chloride Solution  
Kaiqi Shi, Lan Jiang, Ya Li, Shuangxi Shao  
D34. An aqueous PU finishing agent modified by hydroxyl silicone  
Keyong Tang, Fang Wang, Xuejing Zheng, Bing Zhu, Guoli Dai  
D35. A new power tool for the evaluation of collagen type-I chemical stabilisation agents; Part II: Mineral tanning agents  
Madalina Georgiana Albu, Marian Crudu, Ioannis A. Ioannidis, Viorica Deselnicu, Ciprian Chelaru  
D39. Alternative Natural Deliming Agents  
Eser Eke Bayramoglu, Seda Erdogan Bayram  

16:40-17:00 Coffee Break

SESSION 3. Oral lectures on: “New developments in chemical products for the tanning industry”  
Chairman: Mr. Elton Hurlow & Mr. Luis Labastida  

17:00-17:20 D3. Hybrid polymers with double nature acrylic and urethanic for leather finishing  
Mario Jiménez, Montserrat Oliveras, Josep M. Pont Pi  
17:20-17:40 D5. Synthesis and application of the amphiphilic hyperbranched-liner fatliquor  
Xuechuan Wang, Zhaofeng Huang, Taotao Qiang, Longfang Ren, Genbao Wang, Yuxuan Wang, Zhang Baohua  
17:40-18:00 D27. Structural Colours like Chameleon for Leather  
Alois G. Püntener, Fritz Dannenhauer
18:00-18:20 D12. High-fastness fatliquors from renewable resources
Leonardus Strijbos, Rupert Saumweber, Markus Hess, Catherine Gabagnou, Campbell Page, Jens Fennen

Stefan Meier, Harald Kiesow, Gerhard Wolf

18:40-19:00 B66. Genuine Leather Mark: An important measurement to promote and protect natural leather.
Chen Zhanguang, Bi Bo, Qi Junping, Su Chaoying

19:00-19:05 Presentation of the IUC/IUF/IUP Commission
19:05-19:10 Presentation of the IUE Commission
Thursday 29, September 2011

SESSION 4. Oral lectures on: “Clean innovative technologies in the tanning industry”
Chairman: Prof. Anthony Covington & Dr. Agustí Marsal

8:15-8:35 B1. Ozone as biocide in soaking
M. M. Mutlu, B.H. Cadirci, H. Ozgunay, A.C. Adiguzel, O. Sari
8:35-8:55 B3. Preserving wool-on skins in pickle
Tim Allsop
8:55-9:15 B4. Fibre stabilization before Enzyme-only beam house operation – An innovative approach for fail-safe chemical-free process
N. K. Chandra Babu, B. Swarna Kumari, R. Karthikeyan, R. Ramesh, A. Jayaprakash, R. Venba
9:15-9:35 B5. Utilization of bovine hairs recovered from the hair-save unhairing process for preparing the filling agent for retanning: environmental and economic considerations
Liu Wentao, Li Guoying
Franck R. de Souza, Mariliz Gutterres
9:55-10:15 B24. Polycarbodiimide Crosslinkers in Leather Finish Applications
André Derksen, Ans van den Goorbergh

10:15-10:35 B39. Composite drying with simultaneous vacuum and toggling
Cheng-Kung Liu, LinShu Liu, Nicholas P. Latona, Neil M. Goldberg, Mila Aldema Ramos, Peter Cooke
10:35-11:00 Coffee Break

SESSION 5. Oral lectures on: “New developments in chemical products for the tanning industry”
Chairman: Dr. Selime Mentes & Mr. Jaume Parareda

11:00-11:20 D2. Screening of a new bacterium that produces enzymes with application on leather processing
Aline Dettmer, Élita Cavalli, Mariliz Gutterres, Marco A. Z. Ayub
11:20-11:40 D7. New type of titanium-based tannage
Mª Vicenta Galiana, Silvino Navarro, Vicente Segarra, Joaquín Ferrer, Esther Riquelme
11:40-12:00 D8. Fatliquoring from a Viewpoint of Sustainability
Christine Fischer, Francina Izquierdo, Peter Mährner, Josef Drexler, Ivo Reetz, Ramon Segura
12:00-12:20 D9. X-Tan® an innovative organic tanning technology with superior sustainability
Dietrich Tegtmeeyer, Chris Tysoe, Juergen Reiners
12:20-12:40 D10. A novel tanning agent for pickle-less chrome free tanning
Li Jing, Luojian-Xun, Liaoxxue-Pin, Shi Bi
12:40-13:00 D11. Eco-friendly tanning agents for use in leather manufacture
Marian Crudu, Ioannis Ioannidis, Vioreica Deselniciu, Luminita Albu, Andra Crudu

E. Nungesser, T. Kermis, C.J. Chung, J. Hoefler, E. LaFleur

MA Jianzhong, Li Yun, GAO Dangge, LÜ Bin

13:40-15:10  Working Lunch

**SESSION 6.** Visual displays on: “Clean innovative technologies in the tanning industry”

Aijun Hou, Liang Liang, Jinxia Du, Jianlin Yan, Biyu Peng
B15. Study on biodegradation of several chrome-free goat garment leathers
Qiang Tao-Tao, Huang Zhao-Feng, Wang Xue-Chuan, Ren Yong-Qiang, Zhou Guo-Xiang, Yang Shu-Qin
B16. A novel low sulphide process for improved ovine leather quality
Richard Edmonds, Tim Allsop, Geoff Holmes, Sue Cooper, Melissa Basil Jones, Richard Haverkamp
B17. Investigation of Acid-Deterioration in Leather Leading towards Finding a Suitable Product for Treatment
Anne Lama, A. P. M. Antunes, Yvette Fletcher, Jeffry Guthrie-Strachan
B18. Molecular Weights and Tanning properties Power of Fractions from the Acacia Mangium Bark
Teng Bo, Cheng Wuyong, Zhang Tao, Gong Ying
B20. Enzymatic unhairing of cattle hide by protease and α-amylase
Yunhang Zeng, Xuepin Liao, Jiahong Lu, Qiang He, Bi Shi
B21. Comparison of the weathering variables on both chrome-tanned and wet-white leather ageing
Luis Ollé, Montse Jorba, Joan Carles Castell, Joaquim Font, Anna Bacardit
B23. Study on Dyeing Technology of Chrome-free Leather and Fur
Shi Shiqi, Jiang Wenjia, Li Shenghong, Chang Ruyi, Huang Li, He Youjie
B30. The Effect of Ambient Temperature Crosslinking Systems on Performance of Acrylic Emulsion Film for Leather
Xi huai Qiang, Yan jiao Wang, Hui Zhang
B34. Mapping alkyl phenol ethoxylates in leathers treated with surfactants and fatliquors: Role of enzymes in the removal of APEO from leather
Mariappan Rameshkannan, Chandra Raghu, Palanisamy Thanikaivelan, Bangaru Chandrasekaran
B35. Evaluation of increase at the production of keratinolytic enzymes.
Betina Galarza, Ivana Cavello, Laura Garro, Cecilia Gortari, Roque Hours, Carlos Cantera
B36. Potential Usage of Tannic Acid in Soaking Process
Arife Candaş Adıgüzel Zengin, Selime Menteş Çolak, Gökhan Zengin
B40. Detection of changes of biochemical parameters during beamhouse leather-processing
Y. K. Lin, S. Y. Chang, C. F. Huang, C. J. Yu

B41. Enzymatic dehairing of goat skins utilizing protease from *Pseudomonas fluorescens* species isolated from fish visceral wastes
Kandasamy Nadiya, Sundarvel Amsamani, Palanisamy Thanikaivelan, Bangaru Chandrasekaran

B42. Enzyme consortium of *Aspergillus tamarii* MTCC5152 for greener beam house processing of hides
Muthiah Shanmugavel, Arunachallam Premalatha, Anandan Dayanandan, Ramakrishnan Ramesh, Arumugam Gnanamani, Lesley Sounderraj, Narasiman Kannan Chandrababau, Alla Jayaprakash, Asit Baran Mandal, Gopal Suseela Rajakumar

B44. A technical feasibility study on titanium tanning to obtain upper quality versatile leather
Domenico Castiello, Gianluigi Calvanese, Monica Puccini, Maurizio Salvadori, Maurizia Seggiani, Sandra Vitolo

B45. Performance & characterization of caprolactam-butylacrylate co-modified casein(CA-CPL-BA) leather finishing agent prepared from emulsifier-free emulsion polymerization
Jianzhong Ma, Qunna Xu, Dangge Gao

B46. Sustainable design, customization and new technologies applied to finished leather. New marketing strategies and paradigm shifts for the tanning industry
Leandra Vallejos Martin, Patricia Casey

B47. Modification of Leather Surface Characteristics with Fiber Coating: Flocking of Leather
Bahri Basaran, Ali Yorgancioglu, Ersin Onem

B49. Investigation of the impact of proteases for use in leather manufacture on elastin
Bingbin Xu, Chengxia Li, Ranran Wang, Chunxiao Zhang, Jianlin Yan, Biyu Peng

B50. Study of New Technologies of Information and Communication (TIC) in tanning industry
P. Latha

B55. Stabilization of collagen using aldehyde forming enzyme - an approach towards enzyme tanning
N. Usharani, GC Jayakumar, Swarna V. Kanth, B. Chandrasekaran

B58. Environmental developments and researches in Brazilian leather sector
Miriam Cooper, Mariliz Gutterres, Nilson Marcilio

B59. Combination tanning based on Tara and THPS: A new chrome free tanning system
B. Madhan, R. Aravindhan, T. Senthil Raja, J. Raghava Rao

B62. A non-Pickling process for hides and skins using SCM
Jianxun Luo, Jing Li, Bi Shi

B64. Liming, deliming and bating: a natural and enzymatic approach by eco agents
F. Crispim, R. Bezerra, P. Salgueiro, A. Crispim, J. Cruz, A. Novo
Futoshi Sugimoto, Tadashi Kishimoto, Yasushi Saeki, Akihito Nishimori, Kazuharu Nakagawa

16:40-17:00 Coffee Break

SESSION 7. Oral lectures on: “Clean innovative technologies in the tanning industry”
Chairman: Dr. Dietrich Tegtmeyer & Dr. Lluís Ollé

17:00-17:20 B2. Wet White tanning by applying a polymeric aldehyde together with dihydroxydiphenylsulfone
Olga Ballús, Enrique Comes, Ramón Palop
17:20-17:40 B6. Antifungal leather finishing with biological extracts
Kathrin Leppchen, Michael Meyer
17:40-18:00 B7. Tara (Caesalpinia spinosa): The sustainable source of tannins for innovative tanning processes
Juan-Carlos Castell, Silvia Sorolla,Montserrat Jorba, Joaquim Aribau, Anna Bacartit, Lluís Ollé
18:00-18:20 B8. Studies on role of unnatural amino acids in leather tanning process for making chrome-free leather
Ganesan Krishnamoorthy, Sayeed Sadulla, Praveen Kumar Sehgal, Asit Baran Mandal
18:20-18:40 B9. Transformation of pelts to wet blue, without basification and high chrome exhaustion
José Mª. Adzet
18:40-19:00 B10. Chrome-free leather, tanned with oxazolidine
M. Roig, V. Segarra, M. Bertazzo, M. A. Martínez, J. Ferrer, C. Raspi

19:00-19:05 Presentation of the IUR Commission
19:05-19:10 Presentation of the IUT Commission
Friday 30, September 2011

SESSION 8. Oral lectures on: “Future technologies in the tanning industry”
Chairman: Prof. Bi Shi & Mr. Joan Carles Castell

8:15-8:35  F1. A new drying application on garment leather  
Sergio Alonso, Roberto Zitzumbo, Martín López
8:35-8:55  F2. Shoe finishes as current trends in fashion  
Felipe Miralles, Rafael Galindo
8:55-9:15  F3. Increasing of feel permanence on leather finishing by a nanotechnological application  
Evrin Berkant, Gökhan Zengin, Altan Afşar
9:15-9:35  F5. New plastics with gelatin and urethane  
Yoshihiro Nomura, Toshihiko Kitaura, Takuma Suzuki, Keiji Yoshimura
9:35-9:55  F8. The Role of Leather Science and Technology in Heritage Conservation  
Roy Thomson, A.P.M. Antunes, J. Stobart, A.D. Covington
9:55-10:15  E56. Energy savings in Bangladeshi tanneries through solar energy use and electrical performance improvement  
Luisa F. Cabeza, Cristian Solé, Himangshu Ranjan Ghosh, Ahasanuzzaman, Mohammad Anisur Rahman, Ivan Kral
10:15-10:40  B19. Characteristics of Diabetic Patients with Hallux Valgus Based on the Plantar Pressure and Foot Dimension Measurements  
Jin Zhou, Luming Yang, Wuyong Chen, Petr Hlavčák, Bo Xu
10:40-11:00  Coffee Break

Chairman: Dr. Mariliz Gutterres & Dr. Rita Puig

11:00-11:20  E1. Methods of isolation and identification pathogenic and potential pathogenic bacteria from animal skins and tannery effluents  
Anne Lama, Geoff Attenburrow, Margaret Bates, Anthony D. Covington, Stuart C. Allen, A. P. M. Antunes
11:20-11:40  E2. Eco-design: Life Cycle Analyses show that Energy is a key factor for the environmental impact of leather and might save money  
Thierry Poncet, Régis Lety, Stephane Contini
11:40-12:00  E4. Processing and characterization of innovative thermoplastic materials from wastes of the leather industry  
Monica Puccini, Domenico Castiello, Gianluigi Calvanese, Tiziana Gambicorti, Maurizia Seggiani, Sandra Vitolo
12:00-12:20  E5. Recent Development in Cleaner Production and Environment Protection in World Leather Sector  
S Rajamani, Rita Puig
Guilherme P. S. Priebe, Mariliz Gutterres, Nilson R. Marcílio, Eduardo Kipper
12:40-13:00 E45. Greener Leather Processing: Development of Bio-energy from Biodegradable and Recyclable Leathers
Swarna V. Kanth, J. Raghava Rao, B. Chandrasekaran, Balachandran U. Nair

13:00-13:20 E55. Degreasing process based on the use of DME
Ramon Terrado, Martin van Mierlo, Xavier Marginet

13:20-14:50 Working Lunch

SESSION 10. Visual displays on: “Use of advanced techniques for leather analysis”

14:50-16:20 C6. Behaviors of fat liquored leathers in a microwave field
Ying Gong, Tao Zhang, Wuyong Chen

C7. Study on variational regularity of leather creep property under lastometer deformation in different dry processes
Chen Jing, Cheng baozhen, Zhang xiaolei, Cao Shan

C11. Characterization of solid materials from the leather industry by mercury porosimetry

C12. Physical properties of leathers for assessment of thermal comfort
Rosario Mascolo, Maria Scotti, Claudia Florio, Biagio Naviglio, Gianluigi Calvanese

C13. Procedure for the gravimetric determination of the relative humidity in standard-conditioned test laboratories
Fernando Maldonado, Josep Carilla, Augustin Marsal, Albert M Manich

C14. Hybrid Method for Automated Leather Grading System using Image processing techniques
Malathy Jawahar, N. Senthil Kumaran, R. Venba, N K Chandrababu

C15. Gas Chromatography as a Tool for Quality Control in Production of Bovine Tallow Olein
Guilherme P. S. Priebe, Mariliz Gutterres

C18. Determination and quantification of Polychlorinated Alkanes in Leather by gas chromatography and mass spectrometry
Aurélien Rey, Nicolas Blanc, Jean Claude Cannot, Alain Berthod

Visual displays on: “Waste products and environment”

E3. Carbon Footprint – A Valuable Tool for Leather?
Jesus Ocana Corral, Gerhard Wolf

E8. Treatment and Recycling of Chrome Tanning Waste Water
Cheng Baozhen, Cao Shan, Liu Na, Niu Yan

E9. Removal of sulfate in tannery wastewater through combining anaerobic with aerobic activated sludge
Changqing Zhao, Wu Yong Chen, Hao Zhang, Bo Teng

E10. Preparation of bio-adhesive based on poly(acrylic ester) grafted hydrolysates from leather waste
Yang Wei, Liu Wentao, Li Guoying
E16. Cleaner production and treatment of leather industry wastewater by two-phase anaerobic and humic filler bed process
Hongrui Ma, Li Huax, Jun wu

Cavello Ivana, Galarza Betina, Garro Laura, Hours Roque, Cavalitto Sebastián, Cantera Carlos

E27. Oxidative chromium recovery from tannery sludge
Eylem Kiliç, Joaquim Font, Rtra Puig, Selime Çolak, Deniz Gürler

E28. Utilization of sustainable resources in leather processing
Maryann M. Taylor, Eleanor M. Brown and Cheng-Kung Liu

E30. Surfactants obtained by acylation of the protein fraction recovered from tannery effluent
Mª Elena Bautista, Lourdes Pérez, Sara Cuadros, M. Teresa García, Albert Mª Manich, Agustin Marsal

E31. Environmental Costs in Beamhouse Tannery
Luis Sergio Nunes Costa, André Rosa

E35. Adsorbent materials from solid wastes of vegetable tanning from the leather industry

E36. Tannery Solid Waste Management: Wealth from Waste
Nishtar Nishad Fathima, S N Jaisankar, Jonnalagadda Raghava Rao, Balachandran Unni Nair

E37. Catalytic combustion of tannery sewage sludge
Diana Sannino, Vincenzo Vaiano, Paolo Ciambelli, Daniela Caracciolo, Biagio Naviglio, Gianluigi Calvanese

E38. Use of polysaccharidic industrial wastes for a low-impact treatment of tannery wastewater
Biagio Naviglio, Gianluigi Calvanese, Gelsomina Tortora, Francesco Pirozzi, Massimiliano Fabbricino

E39. Isolation of Chromium tolerant bacteria from tannery for bioremediation of Cr(VI)
Uthirappan Mani, Dhana Singh Sujatha, Kalimuthu Balasarswathi, Chellan Rose, Asit Baran Mandal

E42. Re-I use of water treated about the Leather Industry of the City of León, Guanajuato. México
Sabino José Rodríguez Rendón

E46. Studies on tolerance and accumulation of salt by Salicornia brachiata and its potential for phytoremediation
Deepa Santhana Krishnan, Ramesh Kannan Perumal, Yasothai Arjunan, Swarna Vinodh Kanth, Raghava Rao Jonnalagadda, Chandrasekaran Bangaru

E48. Modified bentonites as adsorbents for retaining anionic dyes used in tanning industry
Julien Bailly, Cristina Volzone, Carlos Cantera, Alberto Greco

E50. System for biodegradability evaluation on leather used in the footwear industry
M. Bertazzo, D. Poveda, A. Albert, V Segarra-Orero, M. Roig, N. C. Garrote, M. I. Maestre Lopez, M.A. Martinez-Sanchez
E51. Sustainability and future scenario of small and medium leather tanneries through environmental compliance
Shweta Singh, S Rajamani

Visual displays on: “Future technologies in the tanning industry”

F6. Development of natural oil micro-emulsions for scent infused leathers
Raghava Rao Jonnalagadda, Punitha Velmurugan, Geetha Baskar, Balachandran Unni Nair

F7. Synthesis and characterization of collagen Hydrolysate/poly (vinyl alcohol)/silica Biodegradable Hybrid Composites
Jie Liu, Xuejing Zheng, Fang Wang, Keyong Tang

F9. Application of ultrasound to obtain a high quality grain vegetable leather.
Josep Maria Morera, Felip Combalía, Esther Bartoli

F10. Polyurethane/polyacrylate/silica nanocomposite prepared by seeded emulsion polymerization
Yan Bao, Jianzhong Ma, Junli Liu, Juan Lu

F14. Smart Materials for Stimuli Responsive Leather
Nishtar Nishad Fathima, Selvam Sangeetha, Kalarical Janardhanan Sreeram, Jonnalagadda Raghava Rao, Balachandran Unni Nair

F15. Sisal microfibril/gelatin biomass composite
Xuejing Zheng, Jie Liu, Ying Pei, Junwei Li, Keyong Tang

F16. Instantaneous tanning from dehydrated collagen biomaterial (BCD). An approach to Mass-Customization and Manufacturing Sustainability
Joan Carles Castell, Rosa Sabé, Federico Brugnoli, José Mª Adzet

F17. Development of Collagen based Smart Drug Delivery Systems
Ivy Kanungo, N. Nishad Fathima, J. Raghava Rao, B. U. Nair

16:20-16:40 Coffee Break

SESSION 11. Oral lectures on: “Use of advanced techniques for leather analysis”
Chairman: Dr. Thierry Poncet & Mr. Vicente Segarra

16:40-17:00 C1. Infrared spectroscopy (FTIR and NIR) possibilities to determine the tanning degree of the vegetable leather
Trini Canals, Josep Maria Morera, Felip Combalía y Esther Bartoli

17:00-17:20 C3. Advanced approaches in leather research using SEM microscopy X-ray probe equipped
Claudia Florio, Roberta Aveta, Gelsomina Tortora, Biagio Naviglio, Gianluigi Calvanese

17:20-17:40 C16. APEOs in leather processing – A survey
He-Wei Ma, Xin-Xia Huang, Hui-Min Zhang

17:40-18:00 E53. Production of Calendula Flower (Calendula officinalis L ) and keratin containing cream from leather industry wastes
Eser Eke Bayramoglu, Ali Yorgancioglu, Gülzinat Yeldigar, Ersin Onem

18:10-19:15 Council of IULTCS delegates

19:30 Closing Ceremony