

8. međunarodna konferencija
International Textile, Clothing & Design Conference 2016
Magic World of Textiles

Dubrovnik, 2.-5. listopada 2016.



Sveučilište u Zagrebu Tekstilno-tehnološki fakultet organizirao je 8. International Textile Clothing & Design Conference održanu od 2. do 5. listopada 2016. godine u Međunarodnom središtu hrvatskih studija u Dubrovniku.

Temelj organizacije ovog kongresa je uspješna organizacija svih dosadašnjih ITC&DC kongresa, stoga je ovaj kongres tradicionalan i jedan od najznačajnijih europskih i svjetskih skupova za znanstveno polje tekstilnih i odjevnih tehnologija, mode, dizajna i marketinga.

S obzirom da je kongres tradicionalan, pokroviteljstvo su prihvatile stručne i znanstvene udruge: Ministarstvo znanosti, obrazovanja i sporta RH; Sveučilište u Zagrebu; Hrvatska gospodarska komora, Zagreb; Akademija tehničkih znanosti Hrvatske, DAAAM International, Beč, Austrija; AUTECH Ghent, Belgija; International Federation of Knitting Technologists, Zürich, Švicarska; AATCC – American Association for Textile Chemists and Colorists, Research Triangle Park, USA; ESCORENA, Poznan, Poljska; International Technical Committee for Textile Care, Hrvatsko društvo kemijskih inženjera i tehnologa, Hrvatski inženjerski savez tekstilaca, CARNet i Znanstveno-istraživački centar za tekstil, Zagreb. Predsjednik Znanstvenog i programskog odbora je bila Sandra Bischof, dok su članstvo prihvatili: D. C. Adolphe (FR); G.J. Brinks (NL), A. Curteza (RO); K. Dimitrovski (SI); Z. Dragčević (HR); J. Geršak (SI); J.W.S. Hearle (UK); H. Kadoglu (TR); B. Katalinić (AT); R. M. Kozłowski (PL); S. Kukle (LV); A. V. Kulichenko (RU); T. Luxbacher (AT), H. Mattila (FI); R. Milašius (LT); J. Militky (CZ); K. Opwis (DE); R. Postle (AU); I. Soljačić (HR); N. Starszakowna (GB); G. Stylios (GB); X. Tao (CN); A. Ujhelyiová (SK); C. Q. Yang (US).

U postupku organizacije prijavljena su 142 rada, te pristiglo 138 sažetaka, dok je cjelovitih radova zaprimljeno 121 od kojih je međunarodni recenzentski odbor prihvatio 89 koji su tiskani u Book of Proceedings of the 8th ITC&DC 2016 i podijeljeni u 7 sekcija kao zasebna specifična područja znanstvenih istraživanja:

- sekcija A: Tekstilna vlakna i napredni materijali - Textile fibres and advanced materials (21 rad)
- sekcija B: Proizvodnja pređa, pletiva, tkanina i netkanog tekstila - Manufacture of yarns, fabrics and nonwovens (3 rada)
- sekcija C: Oplemenjivanje i njega tekstila - Textile finishing, dyeing and care (17 radova)
- sekcija D: Odjevna tehnologija i inženjerstvo - Clothing technologies and engineering (6 radova)
- sekcija E: Analiza, ispitivanje i kontrola kvalitete - Analysis, testing and quality control (16 radova)
- sekcija F: Dizajn i marketing tekstila i odjeće - Design and marketing of textile and clothing (14 radova)
- sekcija G: Okoliš, ekologija i upravljanje energijom - Environment, ecology and energy management (9 radova).

Plenarno predavanje je održao prof. dr. sc. Dominique C. Adolphe s Ecole Nationale Supérieure des Industries Textiles de Mulhouse, Francuska pod naslovom The Electro-Spinning Devices the Opened Door to the Nano Dimension, dok su Expert Focus Lectures održali dr. sc. Klaus Opwis (Textile Mining - Digging for Noble Metals from Industrial Process Waters) i prof. dr. sc. Heikki Mattila (Digital Fashion – How and When?).

U Book of Proceedings bilo je tiskano 89 radova s ukupno 208 autora iz 27 zemalja Europe i svijeta od čega je 17 radova bila iz Hrvatske, a 72 radova iz inozemstva (EU; tranzicijske zemlje, SAD, Kina, Kolumbija, Južnoafrička Republika, Južnoafrička Republika, Indija, Rusija, Turska).

S obzirom da je Book of Proceedings postao i periodička publikacija (ISSN 1847-7275) bit će prosljeđena u odgovarajuće baze koje referiraju radove iz područja tekstilne i odjevne znanosti. Radovi objavljeni u Book of Proceedings bit će također indeksirani u Conference Proceedings Citation Index- Science (CPCI-S).

Broj radova koji su bili prezentirani pokazuju povećani udio mladih istraživača što ukazuje da su znanstvena istraživanja u području tekstila atraktivna, zanimljiva i privlačna. Značajno je istaknuti da su u 9 radova objavljeni rezultati međusobne suradnje autora iz različitih zemalja.

Znanstveno, nacionalno i društveno značenje za Republiku Hrvatsku ovog tradicionalnog skupa – 8th ITC&DC 2016 sadržano je u činjenici da je to jedan od najvećih i najznačajnijih skupova iz znanstvenog polja tekstilna tehnologija i postao je značajni međunarodni forum za prezentiranje i izmjenu znanja, iskustva, rezultata i spoznaja koje su vezane

uz nova znanstvena dostignuća u polju tekstilne i odjevne tehnologije, kao i dizajna i marketinga tekstila i odjeće.

8th ITC&DC 2016 je platforma za nastavak uspostavljanja kontakata i međunarodne suradnje djelatnika Tekstilno-tehnološkog fakulteta što je u ovom trenutku posebno značajno za uključenje i djelovanje znanstvenika iz Republike Hrvatske u međunarodne projekte i korištenja fondova Europske unije.

Organizacija i provođenje 8th ITC&DC 2016 u Dubrovniku organizirana je preko Internet stranica u okviru koje su bili linkovi na www stranice pokrovitelja kongresa, kao i mrežu sekretarijata ESCORENA (European System of Cooperative Research Networks) i International Network for Advanced Technologies.

Ubrzo po završetku 8th ITC&DC 2016 pristigla su mnoga pisma i E-mail poruke zahvale na ugodnom boravku i dobroj organizaciji s priložima fotografija i videosnimaka svih aktivnosti kongresa od kojih je sačinjena foto galerija dostupna na našim Internet stranicama.

Cjelokupnu organizaciju i provođenje izvodio je Organizacijski odbor (ITC&DC Team) u sastavu: Z. Dragčević – predsjednik, N. Vuljanić – dopredsjednik, E. Vujasinović, T. Pušić, A. Hursa Šajatović, B. Šaravanja, te pridodani članovi D. Jokić, B. Mauser, M. Pavunc Samaržija, I. Špelić i M. Šperanda uz znatnu pomoć pri administrativnim poslovima vezanim uz financijsko poslovanje od M. Rihtarec, A. Vlaho i K. Novaković.

U dosadašnjih sedam održanih ITC&DC konferencija na kojima je sudjelovalo više od 2500 autora iz 38 zemalja Europe i svijeta stvorena je naša velika ITC&DC obitelj, koja je našla zahvaljujući ljubaznosti Međunarodnog središta hrvatskih sveučilišta, svoj dom u Dubrovniku.

S obzirom na uspjeh svih dosadašnjih ITC&DC kongresa postigli smo značajan iskorak našeg fakulteta i tekstilne znanosti u Hrvatskoj i svijetu te će ostvarenje ovakvog oblika značajne međunarodne suradnje biti jedan od prioritarnih zadataka. Zato će se nastaviti s kontinuiranim djelovanjem u okviru organizacije narednog 9th ITC&DC 2018 koji bi zbog dobre i uspješne suradnje s Međunarodnim središtem hrvatskih sveučilišta bio također organiziran u Dubrovniku.

Ovime se Organizacijski odbor 8th ITC&DC 2016 zahvaljuje časopisu Tekstil što je prihvatio za objavu izbor radova s ovog međunarodnog skupa i time pridonio promociji rezultata s ovog kongresa.



Poslijediplomsko središte Dubrovnik (PSD) Sveučilišta u Zagrebu, Don Frane Bulića 4, Dubrovnik gdje se od 2002. godine tradicionalno održava ITC&DC konferencija

Organizacijski odbor 8th ITC&DC 2016

The 8th International Textile, Clothing & Design Conference 2016

Magic World of Textiles

Dubrovnik, October 2nd – 5th 2016



The University of Zagreb, Faculty of Textile Technology, organised the 8th International Textile Clothing & Design Conference, which was held at the Centre for Advanced Academic Studies in Dubrovnik from October 2nd to October 5th 2016.

The conference was organised on the solid foundation of successful previous ITC&DC conferences. The conference has become a traditional one and at the same time one of the most important European and global conferences in the scientific field of textile and clothing technologies, fashion, design and marketing.

As the conference proved to be a successful and important one, various professional and scientific associations and institutions have accepted its patronage and auspice: Ministry of Science; Education and Sports of the Republic of Croatia; The University of Zagreb; Croatian Chamber of Economy in Zagreb; Croatian Academy of Engineering; DAAAM International, Wien, Austria; AUTEX, Ghent, Belgium; International Federation of Knitting Technologists, Zürich, Swiss; AATCC – American Association of Textile Chemists and Colorists; Research Triangle Park, USA; ESCORENA, Poznan, Poland; International Technical Committee for Textile Care; Croatian Society of Chemical Engineers; Croatian Association of Textile Engineers; CARNet and Scientific research Centre for Textiles Zagreb.

The president of the Scientific and Programme Committee was Sandra Bischof, while the members were: D. C. Adolphe (FR), G.J. Brinks (NL), A. Curteza (RO), K. Dimitrovski (SI), Z. Dragčević (HR), J. Geršak (SI), J.W.S. Hearle (UK), H. Kadoglu (TR), B. Katalinić (AT), R. M. Kozłowski (PL), S. Kukle (LV), A. V. Kulichenko (RU), T. Luxbacher (AT), H. Mattila (FI), R. Milašius (LT), J. Militky (CZ), K. Opwis (DE), R. Postle (AU), I. Soljačić (HR), N. Starszakowna (GB), G. Stylios (GB), X. Tao (CN), A. Ujhelyiová (SK) and C. Q. Yang (US).

Some 142 papers were announced, 138 summaries were received, to be followed by 121 complete papers. The International reviewing committee accepted 89 papers and they were published in the Book of Proceedings of the 8th ITC&DC 2016, divided into 7 sections, covering specific areas of scientific research:

- Section A: Textile fibres and advanced materials (21 papers)
- Section B: Manufacture of yarns, fabrics and nonwovens (3 papers)
- Section C: Textile finishing, dyeing and care (17 papers)
- Section D: Clothing technologies and engineering (6 papers)
- Section E: Analysis, testing and quality control (16 papers)
- Section F: Design and marketing of textile and clothing (14 papers)
- Section G: Environment, ecology and energy management (9 papers).

Plenary lecture was given by Prof. Dominique C. Adolphe, Ph.D. from the Ecole Nationale Supérieure des Industries Textiles de Mulhouse, France, under the title The Electro-Spinning Devices - the Opened Door to the Nano Dimension, while Expert Focus Lectures were given by Klaus Opwis, Ph.D. (Textile Mining - Digging for Noble Metals from Industrial Process Waters) and Prof. Heikki Mattila, Ph.D. (Digital Fashion – How and When?).

Book of Proceedings published 89 papers by 208 authors from 27 European and out-of-Europe countries, of which 17 papers were by Croatian authors and 72 by foreign authors (EU; transition countries, USA, China, Columbia, South African Republic, India, Russia, Turkey).

As our Book of Proceedings has become a periodical (ISSN 1847-7275), it will be forwarded to adequate databases which cite the papers in the field of textile and clothing science. The papers published in the Book of Proceedings will also be indexed by the Conference Proceedings Citation Index- Science (CPCI-S).

The number of papers presented at the conference also witnesses to the increasing presence of young researcher, which shows that scientific research in the field of textiles is attractive and interesting. It should be noted that in 9 of the papers results of collaboration of the authors from different countries were presented.

Scientific, social and national importance of this traditional conference, the 8th ITC&DC 2016, for the Republic of Croatia is mirrored by the fact that this is one of the largest and highly important conferences in the field of textile technology globally, and has become an important international forum to present achievements and exchange knowl-

edge, experiences, results and new notions related to new scientific developments in the fields of textile and clothing technologies, as well as textile and garment design and marketing.

The 8th ITC&DC 2016 is also a platform on which the researchers from the Faculty of Textile Technology get a chance to maintain their contacts and international cooperation, which is of importance especially for the involvement and functioning of Croatian scientists in the international projects and using EU funds for the purpose.

The 8th ITC&DC 2016 in Dubrovnik was organised through our web sites, with the links to the web sites of the conference sponsors, as well as to the ESCORENA secretariat (European System of Cooperative Research Networks) and International Network for Advanced Technologies.

After closing the 8th ITC&DC 2016 conference we have received numerous letters and e-mails expressing thanks for a pleasant stay in Dubrovnik and good organisation, with photos and video recordings attached, depicting all the Conference activities. We have compiled a photo gallery of this material and it can be seen at our web pages.

The whole of the organisation and implementation of the Conference planned activities were done by the Organising Committee (ITC&DC Team): Z. Dragčević – president, N. Vuljanić – vice-president, E. Vujasinović, T. Pušić, A. Hursa Šajatović, B. Šaravanja, as members, as well as associate members D. Jokić, B. Mauser, M. Pavunc Samaržija, I. Špelić and M. Šperanda. Considerable administrative help, particularly in solving financial issues, was kindly given by M. Rihtarec, A. Vlaho and K. Novaković.

Seven previous ITC&DC conferences organised in Dubrovnik, with more than 2500 participants from 38 countries in Europe and overseas, have created our big ITC&DC family, which has found, thanks to the kindness of the people in the Centre for Advanced Academic Studies, its home here in Dubrovnik.

The success of all of our eight ITC&DC conferences has also contributed to a significant step forward of our Faculty and textile science in Croatia and globally. This form of significant international cooperation will be one of the priorities of the Faculty in the future, and will be continued with the organisation of the next 9th ITC&DC 2018 conference, also in Dubrovnik, due to our excellent and prosperous cooperation with the CAAS.

The Organising Committee of the 8th ITC&DC 2016 uses this opportunity to express our sincere thanks to the trade journal Tekstil for support and readiness to publish a selection of the papers from this international conference, thus contributing to the promotion of the conference results.



The premises of the Centre for Advanced Academic Studies (CAAS), University of Zagreb, Don Frane Bulića 4, Dubrovnik, where ITC&DC conferences have been traditionally organised since 2002.

Organising Committee of the 8th ITC&DC 2016