FIBRES & TEXTILES in Eastern Europe

published by
Instytut Biopolimerów i Włókien Chemicznych
Institute of Biopolymers and Chemical Fibres (IBWCh), Łódź, Poland

Editorial Office
ul. Skłodowskiej-Curie 19/27, 90-570 Łódź, Poland
tel. (48-42) 638-03-00, fax (48-42) 637-65-01
e-mail: infor@ibwch.lodz.pl  http://www.fibtex.lodz.pl

Volume 24, No. 4 (118)
July / August
2016
ISSN 1230-3666

Fibres & Textiles in Eastern Europe is inserted on the 'ISI Master Journal List' of the Institute for Scientific Information, Philadelphia, USA (for the year 2015 has an Impact Factor of 0.566).

In Index Copernicus Journal Master List in 2014 FIBRES & TEXTILES in Eastern Europe ISSN 1230-3666 has received ICV = 118.49. Fibres & Textiles in Eastern Europe is indexed in Research Alert, SCI Expanded (Sci Search and Web of Science), the Materials Science Citation Index, Current Contents/Engineering, Computing & Technology; as well as by the Textile Institute, Manchester, in the Information Service; and in Rapra Technology Ltd.; Elsevier Geo Abstracts; Chemical Abstracts Service; and by Referativny Zhurnal, among others.

The content of ‘Fibres & Textiles in Eastern Europe’ is available by free open access on the website http://www.fibtex.lodz.pl, starting from issue No 3/2002.

No part of this publication may be reproduced without the prior written permission of the publisher: Instytut Biopolimerów i Włókien Chemicznych - Institute of Biopolymers and Chemical Fibres.

No responsibility is assumed by the publisher for any injury and/or damage to persons or property as a matter of application of any methods, products, instructions or ideas contained in the material herein. Although all advertising material is expected to conform to ethical standards, inclusion in this publication does not constitute guarantee or endorsement of the quality or value of such product.

On the cover a fragment of Jolanta Owidzka's structural tapestry 'Prayer book'.

This issue is financially supported by the Ministry of Science and Higher Education.

Dariusz Wawro (IBWCh)

Danuta Cichecka (IBWCh)

Izabela Ciesielka-Wróbel (U Gent, NCSU)

Robert Drohina (U-B)

Ryszard Korycki (TUL)

Małgorzata Michnielwicz (IBWCh)

Rymvaidas Mačiulis (KTU)

Monika Rom (UB-B)

Sigitas Stanys (KTU)

Zbigniew Siemieniec (TUL)

Kristyna Twarowska-Schmidt (IBWCh)

Alojzy Urbanowski (IBWCh)

Chairman:

Dariusz Wawro (IBWCh)

Members:

Danuta Cichecka (IBWCh)

Izabela Ciesielka-Wróbel (U Gent, NCSU)

Robert Drohina (U-B)

Ryszard Korycki (TUL)

Małgorzata Michnielwicz (IBWCh)

Rymvaidas Mačiulis (KTU)

Monika Rom (UB-B)

Sigitas Stanys (KTU)

Zbigniew Siemieniec (TUL)

Kristyna Twarowska-Schmidt (IBWCh)

Alojzy Urbanowski (IBWCh)

Chairman:

Prof. Andrzej Zabielski

Polish Academy of Sciences, Warsaw, Poland

Members:

Prof. Valery Bashmatau

Vitebsk State Technological University, Belarus

Prof. Andrej Bledzki

West Pomeranian University of Technology Szczecin, Poland

Prof. Chokri Cherif

Technical University of Dresden, Germany

Prof. Hans-Peter Fink

Potsdam-Golm, Germany

Prof. Janusz Jackowski

Lodz: University of Technology, Poland

Prof. Vladan Koncar

GEMTEX laboratory, ENSAIT, Roubaix, France

Prof. Ryszard Kozlowski

The Institute for Engineering of Polymer Materials and Dyes; FAO Escorcia Network, Toruń, Poland

Prof. Izabella Kruczińska

Lodz: University of Technology, Poland

Prof. Anton Marginean

Slovak University of Technology, Bratislava, Slovak Republic

Prof. Jozef Masajtis

Lodz: University of Technology, Poland

Prof. Vytautas Milius

Kaunas University of Technology, Lithuania

Prof. Jindrich Planc

Denkendorf, Germany

Prof. Zoran Stjepanović

University of Maribor, Slovenia

Prof. Lieve Van Langenhove

Gent University, Belgium