

Polish Chitin Society

**PROGRESS ON CHEMISTRY
AND APPLICATION
OF CHITIN AND ITS DERIVATIVES
(PCACD)**

Volume XXIV

**Łódź, Poland
2019**

All rights reserved

Editor-in-Chief: Malgorzata M. Jaworska

Faculty of Chemical and Process Engineering,
Warsaw University of Technology,
ul. Waryńskiego 1, 00-645 Warsaw, Poland
e-mail: malgorzata.jaworska@pw.edu.pl

International Editors:

R. Brzezinski; Faculty of Science, University of Sherbrooke, Canada
C. M. Caramella, University of Pavia, Italy
S. Hudson, North Carolina State University, USA
H. Kusaoka; Fukui University of Technology, Japan
H. Pospieszny; Institute of Plant Protection, Poland
S. Rossi, University of Pavia, Italy
S. Senel; Faculty of Pharmacy, Hacettepe University, Turkey
V. Varlamov; Russian Academy of Science, Russia

ISSN 1896-5644

©Copyright by the Polish Chitin Society

Printed by: Media-Press, Lodz, Poland

CONTENT

NN. Drozd, BTs. Shagdarova, YV. Zhuikova, AV. Il'ina, MN. Vasiliev, TM. Vasilieva, AM. Hein, VP. Varlamov Thromboresistant silicon plates modified with chitosan and heparin by the layer-by-layer assembly method	5
S. Fadlaoui, O. El Asri, L. Mohammed, A. Sihame, A. Omari, M. Melhaoui Isolation and characterization of chitin from the shells of the freshwater crab <i>Potamon algériense</i>	23
U. Filipkowska, T. Jóźwiak, L. Gache, L. Bolozan The influence of chitosan content in hydrogel beads on the sorption effectiveness of the Reactive Black 5 Dye	36
T. Jóźwiak, U. Filipkowska, L. Bolozan, L. Gache The influence of salinity on Reactive Black 5 dye sorption efficiency on hydrogel chitosan sorbents.	49
Ch. Klinger, S. Żółtowska-Aksamitowska, T. Jesionowski Isolation of chitin from <i>Aplysins aerophoba</i> using a microwave approach	61
VS. Kolodyaznaya, EI. Kiprushkina, IA. Shestopalova, YV. Broyko, ON. Rumiantceva, AI. Albulov, EA. Rogozina Changes in the fatty acid composition of avocado fruit treated with preparations during storage	75
M. Konovalova, B. Shagdarova, V. Zubov, E. Svirshchevskaya Express analysis of chitosan and its derivatives by gel electrophoresis	84
EE. Kuprina, SV. Murashev, EA. Gorlach, VV. Abramzon, PI. Demidov, ES. Grishina, AK. Kostyleva, DS. Treydenfeld Perspective for the use of chitin mineral food additives in the technology of hard-smoked sausages	96
A. Ładniak, M. Jurak, A.E. Wiącek Surface CharacteristicS of DPPC monolayers deposited from titanium dioxide–chitosan–hyaluronic acid subphases on A glass support	106
K. Lewandowska, M. Szulc Rheological and mechanical studies of chitosan blends with the addition of an ionic liquid	119

K. Małolepsza-Jarmołowska The properties of intravaginal globules containing a lactic acid-chitosan complex	127
K. Małolepsza-Jarmołowska Influence of chitosan on the properties of gels protecting of esophageal mucosa	135
M. Matsumoto, S. Ishikawa, T. Kamigaki Durability of chitosan/cellulose hydrogel beads regenerated from an ionic liquid in acidic and basic media and their metal adsorptive characteristics	145
P. Owczarz, A. Rył, Ż. Wichłacz Application of texture profile analysis to investigate the mechanical properties of thermosensitive injectable chitosan hydrogels	151
Y. Privar, E. Modin, S. Bratskaya Removal of alizarin red by supermacroporous cross-linked chitosan monolith sorbents	164
K. Przykaza, K. Woźniak, M. Jurak, A.E. Wiącek Wettability of chitosan-modified and lipid/polypeptide-coated peek surfaces	172
D. Wawro, W. Stęplewski, W. Marcol, E. Skrzetuska, I. Krucińska Nonwoven chitosan – preparation and properties	183
Guide for Manuscript Preparation	193