

ACTA SCIENTIARUM POLONORUM

Scientific journal, issued since 2002,
whose founder and advocate is the Conference of the Rectors of Universities
of Life Sciences

Czasopismo naukowe ukazujące się od 2002 roku,
którego założycielem i patronem jest Konferencja Rektorów Uczelni Rolniczych

Technologia Alimentaria

Food Science and Human Nutrition

Technologia Żywności i Żywienia

11(4) 2012

October – December



Bydgoszcz Kraków Lublin Olsztyn
Poznań Siedlce Szczecin Warszawa Wrocław

Executive Board of Acta Scientiarum Polonorum

Jerzy Sobota (Wrocław) – **chairman**

Kazimierz Banasik (Warsaw), Janusz Falkowski (Olsztyn), Florian Gambuś (Cracow), Franciszek Kluza (Lublin), Janusz Prusiński (Bydgoszcz), Stanisław Socha (Siedlce), Waldemar Uchman (Poznań)

Scientific Board of Acta Scientiarum Polonorum Technologia Alimentaria

Waldemar Uchman – chairman e-mail: chairman@food.actapol.net, phone/fax: +48 61 848 7808

Institute of Meat Technology, Poznań University of Life Sciences, Poland

Zofia Lisiewska – Food Technology

Department of Raw Materials and Fruit and Vegetable Processing, University of Agriculture in Krakow, Poland

Jarosław Walkowiak – Human Nutrition

Department of Gastroenterology and Metabolism, Poznań University of Medical Sciences, Poland

Members

Maria Daniel vaz de Almeida

Faculty of Nutrition and Food Sciences, University of Porto,
Portugal

Bhaskar C. Behera

Plant Science Division, Agharkar Research Institute, **India**

Jerzy Borowski

Chair of Human Nutrition, University of Warmia and Mazury
in Olsztyn, **Poland**

Zbigniew Dolatowski

Department of Meat Technology and Food Quality,
University of Life Sciences in Lublin, **Poland**

Jerzy Dziuba

Chair of Food and Biochemistry, University of Warmia
and Mazury in Olsztyn, **Poland**

Mona A.M. Abd El-Gawad

Dairy Science Department, National Research Center in Dokki,
Egypt

Zygmunt Gil

Department of Fruit, Vegetable and Cereals Technology,
Wrocław University of Environmental and Life Sciences,
Poland

Karl-Heinz Herzig

Institute of Biomedicine, University of Oulu, **Finland**

Zbigniew Krejpcio

Department of Human Nutrition and Hygiene,
Poznań University of Life Sciences, **Poland**

Andrea Laukova

Institute of Animal Physiology, Slovak Academy of Sciences,
Slovakia

Semih Ötles

Food Engineering Department, Ege University, **Turkey**

Werner Praznik

Department of Chemistry, University of Natural Resources
and Applied Life Science, **Austria**

Roman Przybylski

Department of Chemistry and Biochemistry,
University of Lethbridge, **Canada**

Kazim Sahin

Department of Animal Nutrition, Firat University, **Turkey**

Alexander Shleikin

Department of Organic, Physical, Biological Chemistry
and Microbiology, St. Petersburg State University, **Russia**

Managing team

Julita Reguła

– scientific secretary
e-mail: sekretarz@food.actapol.net, fax: +48 61 848 7808

Lucyna Borowczyk

– text editor
e-mail: lbor@up.poznan.pl, phone: +48 61 848 7807, fax: +48 61 848 7808

Hanna Chudzik

– statistics consultant

Małgorzata Kapuścińska

– English language consultant

Covered by: AGRO, Food Science and Technology Abstracts, CAB International, Chemical Abstracts, Directory of Open Access Journals, Ulrich's Database, Copernicus Index, EBSCO, Scopus, MEDLINE/PubMed

ISSN 1644-0730 (print) ISSN 1889-9594 (online)

Printed on acid free paper (Cyclus 80 g/m²)

© Copyright by Wydawnictwo Uniwersytetu Przyrodniczego w Poznaniu

Witosa 45, 61-693 Poznań, Poland

e-mail: wydawnictwo@up.poznan.pl <http://www.wydawnictwo.up-poznan.net>

Print: Zakład Graficzny Uniwersytetu Przyrodniczego w Poznaniu

Wojska Polskiego 67, 60-625 Poznań