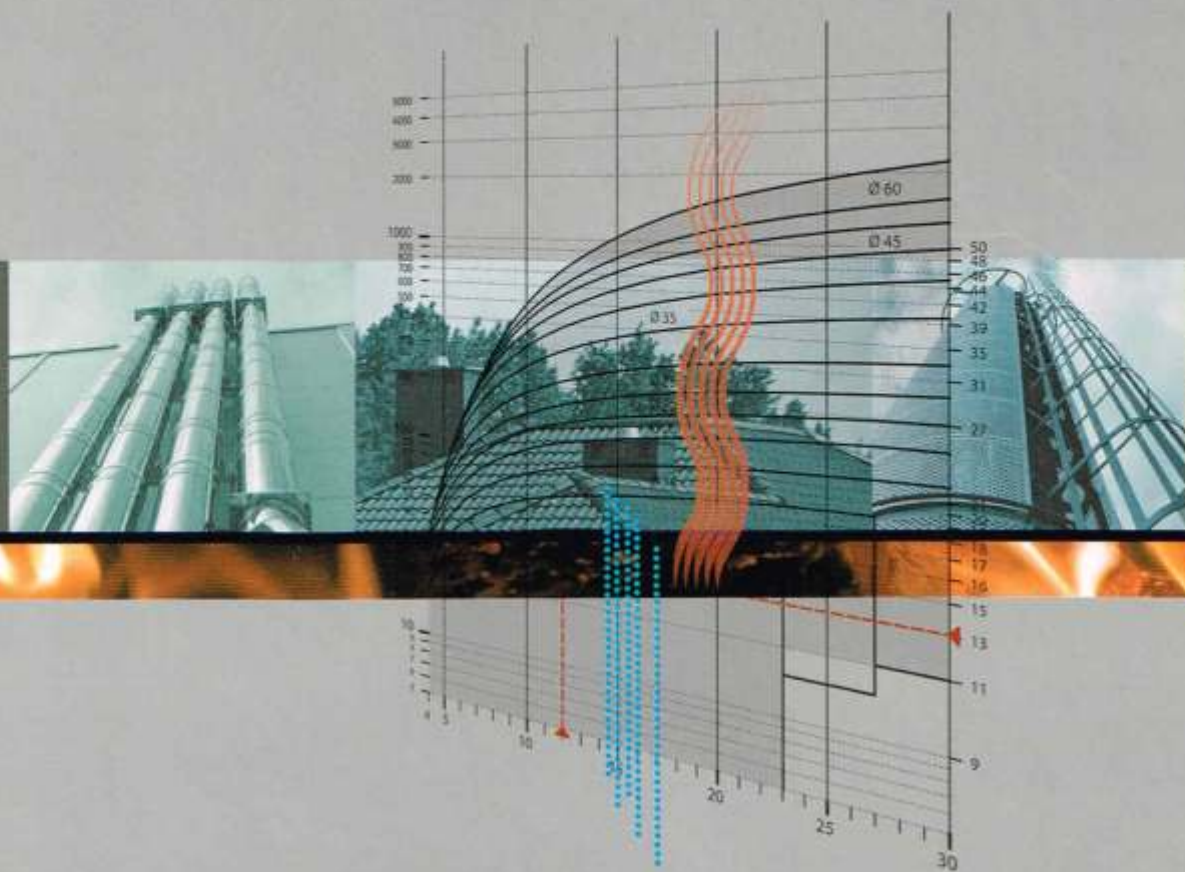


THE CHIMNEY

AS A TECHNOLOGICAL CHALLENGE OF MODERN TIMES

A monograph



Scientific editor
Rudolf Kania

Opole – Vienna 2011

Contents

Introduction.....	5
Rudolf Lončarić, <i>The University of Zagreb</i> Zdenko Patafta, <i>President of the Croatian Association of the Building and Mineral Materials Manufacturers</i> The chimney as a cultural and technological element of buildings – a historical outline based on the case study of the Balkan States	7
Johann Haidlmair, <i>Forum Individuelles Heizen</i> The chimney and its functions – the origin, terminology, notions	37
Rudolf Kania, <i>Business Centre Club Representative at ECA</i> Measuring diffusion of innovation using BASS method on the basis of triple-wall ceramic chimney systems.....	43
David Wright, Jim Murray, <i>British Flue and Chimney Manufacturers Association, British Standards Institute</i> Thomas Mühl, <i>European Chimneys Association, Initiative Pro Schornstein e.V.</i> From Prometheus through to Pellets - keeping home fires burning - the European market of steel duct exhaust systems, technologies and trends	61
Krystyna Kubica, <i>Institute of Thermal Technology Silesian University of Technology</i> Anne Turbe, <i>BIO Intelligence Service, France</i> Robert Kubica, <i>Department of Chemical and Processing Apparatus Construction, Silesian University of Technology</i> Robert Stewart, <i>AEA Technology, Energy & Environment Gemini Building, Oxfordshire, UK</i> Solid fuel boilers as small combustion installations – energy efficiency and influence on environment	71
Günther Brauner, <i>Vienna University of Technology, Austria</i> From the centralized hydro-thermal to the decentralized renewable – the Austrian challenge	95
Robert Kubica, <i>Department of Chemical and Processing Apparatus Construction, Silesian University of Technology</i> Krystyna Kubica, <i>Institute of Thermal Technology Silesian University of Technology</i> Maksymilian Gądek, <i>Department of Chemical and Processing Apparatus Construction, Silesian University of Technology</i> Emission inventory of pollutants from individual households – a role of the chimney sweeper	103

Andrzej Strugała, <i>Faculty of Fuels and Energy, AGH University of Science and Technology in Krakow</i>	
Grzegorz Czerski, <i>Faculty of Fuels and Energy, AGH University of Science and Technology in Krakow</i>	
Zbigniew A. Tałach, <i>Polish Chimneys Association</i>	
The concentric chimney and air supply ducts – directions of chimney systems development in housing perspective	119
Roman Nowak, <i>Polish Committee for Standardization</i>	
Usage of materials in the chimney technology from the perspective of the standards and building regulations effective in Poland	133
Magnus Ohlander, <i>Swedish Standards Institute</i>	
Stainless steel chimneys in Sweden	157
Paweł Sikora, <i>Polish Chimneys Association</i>	
Piotr Cembala, <i>Polish Chimneys Association</i>	
The chimney as a construction product – basic conditions	163
Dariusz Bajno, <i>Polish Engineering Association (NOT)</i>	
Ventilation as a particular safety element in housing development	173
Krzysztof Nowak, <i>Polish Association of Sanitary Engineers and Technicians</i>	
Proper Ventilation as an Important Aspect of Healthy Life.....	181
Piotr Pacyna, <i>Editor-in-chief of the Magazine “The Polish Chimney-Sweeper”</i>	
Nature-friendly ventilation. Health consequences of energy efficiency	191
Zhongxian Yuan, <i>Confucius Institute</i>	
Maria Kania, <i>The Opole University of Technology</i>	
A review of thermal insulation materials and their fire-resistance properties in the Republic of China	201
Appendices.....	207
Chimney technology dictionary.....	215