

Romanian Academy The „Henri Coandă” Prize awarded in 2019 Prof. Ioan SÂRBU, PhD & Lecturer Călin SEBARCHIEVICI, PhD

The Romanian Academy “Henri Coanda” prize for Technical Sciences for 2017 was awarded to the book “Solar Heating and Cooling Systems: Fundamentals, Experiments and Applications”, Elsevier, Oxford, UK, 2017, 424 pages, ISBN 978-0-12-811662-3, authors Ioan Sarbu and Calin Sebarchievici, affiliated to University Politehnica of Timisoara. The award ceremony took place in the high hall for science and culture at the General Assembly of the Romanian Academy on 12th December 2019.

This book provides a comprehensive coverage of emerging solar technologies and applications with an emphasis on heating and cooling in buildings, based on original research and the synthesis of consistent bibliographic material to meet the increasing need for modernisation and for greater energy efficiency to significantly reduce CO₂ emissions. Technical, economic, and energy saving aspects related to design, modelling, and operation of these systems is also explored. This reference includes physical and mathematical concepts developed to make this publication a self-contained and up-to-date source of information for engineers, researchers, and professionals interested in the use of solar energy as an alternative energy source.

The book, which is indexed by the ISI - Web of Science and already present in the libraries of more than 80 top universities in the world, supports the dissemination of the results of the Romanian research worldwide and the affirmation of the knowledge development in Romania.

Ioan Sarbu is a professor emeritus and doctoral degree advisor of the Department of Civil and Building Services Engineering at the Polytechnic University of Timisoara, Romania. He obtained a diploma in civil engineering from the “Traian Vuia” Polytechnic Institute of Timisoara in 1975, a PhD degree in civil engineering from the

Timisoara Technical University in 1993, and the European engineer title, designated by the European Federation of National Engineering Associations (Brussels) in 2001. His main research interests are related to refrigeration systems and heat pumps. He is also active in the field of solar energy conversion and storage and numerical simulations and optimizations in building services. He has published over 370 scientific papers in his research domains, 37 books/chapters, more than 150 articles in indexed journals and about 60 articles in proceedings of international conferences. He is also author of 6 patent certificates and up to 30 computer programs. His current h-index is 18 (Google Scholar), 14 (Scopus) and 11 (Clarivate Analytics Web of Science) as of December 2019.

Calin Sebarchievici is a lecturer of the Civil and Building Services Engineering Department and the Director of the Building Services Engineering Research Centre from the Polytechnic University of Timisoara, Romania. He obtained a diploma in building services engineering and a PhD degree in civil engineering at the Polytechnic University of Timisoara in 2003 and 2013, respectively. His research is focused on heat pumps, refrigeration systems, and solar energy conversion. He is coauthor of 4 books, 4 book chapters, 1 utility model, 19 indexed journal articles and more than 15 conference proceeding publications.

