Vutsova | Yalamov | Arabadzhieva

In Search of Excellent Research Assessment





Science and technology are not only crucial but also paradoxical forces behind societal change. Societies depend on science and technology to solve social problems, but their contributions are often also controversial. The series of publications entitled 'Wissenschafts- und Techikforschung' (Science and Technology Studies) provides a forum in which these developments can be investigated in different dimensions, with a focus on sociology, philosophy, social anthropology and history. The series provides both foundational knowledge in all scientific disciplines as well as guidelines for decision makers and all those interested in this subject area.

Series "Wissenschafts- und Technikforschung" NEUE FOLGE

Edited by

Prof. Dr. Stefan Böschen, RWTH Aachen, Germany

Prof. Dr. Gabriele Gramelsberger, RWTH Aachen, Germany

Prof. Dr. Jörg Niewöhner, HU Berlin, Germany

Prof. Dr. Heike Weber, TU Berlin, Germany

Up to Volume 18 edited by:

Prof. Dr. Alfons Bora, Bielefeld University, Germany

Prof. Dr. Sabine Maasen, TU Munich, Germany

Prof. Dr. Carsten Reinhardt, Bielefeld University, Germany

PD Dr. Peter Wehling, University of Frankfurt am Main, Germany

Volume 24

Albena Vutsova | Todor Yalamov Martina Arabadzhieva

In Search of Excellent Research Assessment





The Deutsche Nationalbibliothek lists this publication in the Deutsche Nationalbibliografie; detailed bibliographic data are available on the Internet at http://dnb.d-nb.de

ISBN 978-3-8487-7587-3 (Print) 978-3-7489-3720-3 (ePDF)

British Library Cataloguing-in-Publication Data

A catalogue record for this book is available from the British Library.

ISBN 978-3-8487-7587-3 (Print) 978-3-7489-3720-3 (ePDF)

Library of Congress Cataloging-in-Publication Data

Albena Vutsova | Todor Yalamov | Martina Arabadzhieva In Search of Excellent Research Assessment Vutsova, Albena | Yalamov, Todor | Arabadzhieva, Martina 176 pp.

Includes bibliographic references.

ISBN 978-3-8487-7587-3 (Print) 978-3-7489-3720-3 (ePDF)

edition sigma in the Nomos Verlagsgesellschaft

1st Edition 2023

© The Authors

Published by Nomos Verlagsgesellschaft mbH & Co. KG Waldseestraße 3–5 | 76530 Baden-Baden www.nomos.de

Production of the printed version: Nomos Verlagsgesellschaft mbH & Co. KG Waldseestraße 3–5 | 76530 Baden-Baden

ISBN 978-3-8487-7587-3 (Print) ISBN 978-3-7489-3720-3 (ePDF)

DOI https://doi.org/10.5771/9783748937203



This work is licensed under a Creative Commons Attribution 4.0 International License.



Acknowledgments

The authors would like to extend their gratitude to the following people, who contributed significantly to the book:

- Dr. Todor Hristov, Sofia University "St. Kliment Ohridski", Bulgaria
- Dr. Ing. Leos Hornicek, Head Office, Czech Academy of Sciences, Czech Republic
- Dr. Tsvetelina Dimitrova, Bikam Plus Ltd, Bulgaria
- Dr. Radostina Angelova, Global Metrics Bulgaria Ltd, Bulgaria
- Dr. Stefan Radev, Apex Group Ltd, Bulgaria
- Dr. Snezhina Gabova, Research & Training Point Foundation, Bulgaria
- Dr. Micheal Ochsner, leader of WG 1, COST Action 15 137 "European Network for Research Evaluation in the Social Sciences and the Humanities", ETH Zurich & FORS Lausanne, Switzerland
- Mrs. Rumyana Muhtarova, Sofia TechPark, Bulgaria
- Mrs. Marina Arnaudova, British Council Sofia, Bulgaria
- Mrs. Vanya Grashkina, Director of the National Centre for Information and Documentation, Bulgaria
- Zhelyaz Enev, Ministry of Economy and Industry, Bulgaria
- Samuel Jezny, Ministry of Education, Youth and Sports, Czech Republic

This work was supported by the project "Building Scientific Capacity through Knowledge Transfer, Exchange of Hands-on Practices, Linked Academic Research and Networking" (SCHOLARNET).

Table of Contents

Intı	roduction and context	9
I.	Research Evaluation: What, Why, Who?	19
	1. Research evaluation in perspective	19
	2. History	21
	3. Research evaluation: tasks	26
	4. Types of research evaluation	30
	5. Evaluation procedures based on scientometrics	40
	6. Bibliometric indicators	41
	6.1. Evaluation procedures based on expert conclusions	48
	6.2. Socio-economic models for research evaluation	48
	6.3. New research evaluation methods	50
	7. Ethics in research evaluation	53
	References	60
II.	Research Impact Assessment	69
	1. Impact assessment – General definition	69
	2. The assessment of scientific research and its impact on higher education systems and horizontal research organisations	75
	2.1. Importance of research assessment for universities	75
	-	
	3. Methods for assessing research impact	77
	4. Social impact of research	84
	5. Practical comments	88
	References	89
III.	Main Methodologies	95
	References	108

Table of Contents

IV.	Comparing research assessment models on a national level	111
	1. Is there a common European model?	112
	2. The Anglo-Saxon research assessment model	114
	3. National research assessment practices in EU Member States	116
	3.1. Austria	117
	3.2. The Netherlands	120
	3.3. Czech Republic	124
	3.4. Hungary	127
	3.5. Bulgaria	130
	3.6. Poland	134
	3.7. Lithuania	137
	3.8. Slovenia	139
	4. Main research assessment indicators influencing the	
	innovation ecosystem	143
	5. Participation in partnership networks	159
	References	161
V.	Concluding reflection and forward looking	167
	References:	174
Lis	of authors	175