



ISSI NEWSLETTER

QUARTERLY E-NEWSLETTER OF THE INTERNATIONAL SOCIETY FOR SCIENTOMETRICS AND INFORMETRICS
ISSN 1998-5460

#68 / VOLUME 17 NUMBER 4
DECEMBER 2021

CONTENTS

EDITORIAL

by W. Glänzel &
S. Heeffer
page 61

NEWS & ANNOUNCEMENTS

Henk F. Moed
(1951–2021).
Obituary.
page 62

Petre T. Frangopol
(1933–2020).
Obituary.
page 65

CONFERENCE REPORT

The 26th Nordic
Workshop on
Bibliometrics in
Odense, Denmark
page 69

ARTICLES & SHORT COMMUNICATIONS

F. Baji:
Introducing
BajiMacro.
A concise software
review
page 74

EDITORIAL

WOLFGANG GLÄNZEL & SARAH HEEFFER

ECOOM, Faculty of Economics & Business, KU Leuven, Belgium

Ten years ago, we have published our second résumé about our newsletter in which we described the e-zine as a continuing success story, and we could not detect, at that time, any sign of a “seven-year itch” or fatigue otherwise. Now one more decade has elapsed since, and it may be allowed to have another look back...

Our scientific community has considerably grown, and our research field has become a full-fledged and respected discipline at last. This development is mirrored by the evolution of its Society, and so it is with our newsletter too. Despite the challenges of the pandemic situation during the last two years, both the community and the society succeeded in continuing work and growing activities – even under changing conditions, if needed. The **ISSI 2021 conference** has been successfully organised and held online as a virtual event attracting more than 400 attendees. We sincerely hope that the **19th ISSI Conference** next year can be held as an in-person meeting again.

During this decade, our society has been growing steadily, so that we could welcome new members from all regions of the world, including many young scientists. At the same time, we also had to say good-bye: We have lost esteemed colleagues and dear friends, to acknowledge their passing away was our sad duty. In this issue too, we will commemorate the life and work of two late members of our community. We have nevertheless the opportunity to briefly report on new events and results in this issue as well. And so, we wish all readers of the Newsletter a healthy and peaceful year 2022.

ISSI e-Newsletter (ISSN 1998-5460) is published by ISSI (<http://www.issi-society.org/>).
Contributors to the newsletter should contact the editorial board by e-mail.

- **Wolfgang Glänzel**, Editor-in-Chief: wolfgang.glanzel[at]kuleuven.be
- **Balázs Schlemmer**, Managing Editor: balazs.schlemmer[at]gmail.com
- **Sarah Heeffer**, Assistant Editor: sarah.heeffer[at]kuleuven.be
- **Sujit Bhattacharya**: sujit_academic[at]yahoo.com
- **Maria Bordons**: mbordons[at]cchs.csic.es
- **Juan Gorraiz**: juan.gorraiz[at]univie.ac.at
- **Jacqueline Leta**: jleta[at]bioqmed.ufrj.br
- **Olle Persson**: olle.persson[at]soc.umu.se
- **Ronald Rousseau**: ronald.rousseau[at]kuleuven.be
- **Dietmar Wolfram**: dwolfram[at]juwmu.edu

Accepted contributions are moderated by the board. Guidelines for contributors can be found at <http://www.issi-society.org/editorial.html>.
Opinions expressed by contributors to the Newsletter do not necessarily reflect the official position of ISSI. Although all published material is expected to conform to ethical standards, no responsibility is assumed by ISSI and the Editorial Board for any injury and/or damage to persons or property as a matter of products liability, negligence or otherwise, or from any use or operation of any methods, products, instructions or ideas contained in the material therein.



HENK F. MOED (1951—2021)

OBITUARY BY

CINZIA DARAIO, WOLFGANG GLÄNZEL,
GALI HALEVI & ED NOYONS



Photo by © Maurizio Perciballi

Research assessment has become an increasingly important and complex task in science policy, research management and funding. The role of quantitative methods has substantially grown, and research performance is more and more conceived as a multi-dimensional concept. Besides the traditional bibliometric indicators based on publication and citation counts, new generations of metrics are recently being explored, denoted with terms such as altmetrics and webmetrics, and obtained from various standardised and non-standardised electronic sources including full-text databases, social media platforms and other sources on the Web. Informetrics and quantitative Science, Technology and Innovation

(STI) studies have enforced their position as an academic discipline, so that STI indicator development is determined at least partially by internal dynamics, although external factors play an important role as well, not in the least the commercial interests of large information companies. This is the conceptual and empirical background in which Henk F. Moed realized his scientific career.

Professor Henk F. Moed was one of the outstanding and world-leading contributors to the advancement of Scientometric methodologies with a special focus on research evaluation. His rich scientific work is characterised by a high scientific rigour, an innovative approach and a sustainable approach to the dissemination and application of research

evaluation methodologies since the early 1980s. Dealing with the peculiarities of the citation analysis and the limitations of the use of journal impact factors, Henk Moed has proposed alternative methods and developed scientific indicators for measuring research in both the sciences, social sciences and humanities. His studies of the appropriate use of scientometrics and bibliometric methods in research evaluation have had a considerable influence on both the scientific debate and institutional implementation at the international level. In particular, by mastering the main evaluation methods, he highlighted and spread awareness of their opportunities, importance and, at the same time, of their limitations, critically analysing and systematically comparing different international practices.

In 1981, Henk started his work at the Department of Science Studies of the “Leids Instituut voor Beleidsonderzoek Nederland” (LISBON) at Leiden University. Together with colleagues van Raan, Burger and Frankfort, he developed a new approach of assessing research performance. This new approach was led by an advanced citation analysis in which the differences of scientists’ communication behaviour in different fields were taken into consideration. The CCP/FCSm indicator became a popular measure for many studies of research performance in the Netherlands and abroad. In 1989, Henk received his PhD degree at Leiden University. The same year, the “Centrum voor Wetenschaps- en Technologiestudies” (CWTS) at the Leiden University was founded, headed by Anthony van Raan. Henk was the head PI of that institute. He was very successful in developing and delivering advanced evaluation studies based on bibliometric data in the Netherlands but also in Flanders, Belgium. Together with Marc Luwel, he managed to transform these studies into a standard procedure within the Flemish Community. This resulted in the foundation of the Expertise Centre for R&D Monitoring in Flanders (ECOOM) headed by Koenraad Debackere and Wolfgang Glänzel.

In Leiden, Henk was known as a supportive colleague for many researchers at CWTS,

always happy and available to explain and discuss methods and approaches in detail. He was also a dedicated program chair for many Science and Technology Indicators (STI) and ISSI conferences. STI was organised biennially and took place every four years in Leiden, while ISSI was hosted at various institutions around the world. Henk chaired almost all the STI meetings until 2004 and was frequently asked to chair the ISSI conference. It was no secret that he loved attending these conferences to discuss new ideas and approaches, not only on stage but also more informally, during coffee breaks, receptions, dinners and other social events.

In the new millennium, Henk shifted the focus of his activities from the Netherlands and Flanders to Spain and Italy, in which he positioned the work and approach of CWTS successfully. In Spain, the University of Granada, and in Italy the University Sapienza in Rome were his hubs and favorite places to spread the word.

In 2009, Henk was appointed professor at the Leiden University as recognition for his tremendous contribution to the development of CWTS. Nevertheless, he decided to take a new challenge at Elsevier, Amsterdam (The Netherlands) as senior scientific advisor in 2010, where he fulfilled this position until 2014.

Henk Moed received several prestigious international assignments and carried out various research projects for the European Commission and different agencies and institutions in the Netherlands, Belgium, the United Kingdom, Italy, Spain, Sweden, Germany, and many other countries, in which he contributed significantly to the introduction of the most appropriate methodologies in the evaluation of university systems, research, and the application of the results to the allocation of public and private resources. In addition, his scientific work contributed significantly to the re-engineering of processes and the organisation of research evaluation activities. He has published more than 170 scientific articles including several contributions and comments in the prestig-

ious journal *Nature* and the most important specialised journals with particular reference to the criticism of the impact factor of the journals (1996); to the effects of funding on the progress of research (1998, 1999) and to the criteria for the correct use of bibliometric indicators in the evaluation of research (2002). He was also one of the first scientists to address the question of what is an acceptable “error rate” in the assessment process, notably at different levels of aggregation (2010). In 2005, he published a monograph, “Citation Analysis in Research Evaluation” (Springer), which, in addition to being one of the very few textbooks in the field, provides a broad scientific/academic audience with a theoretical background of reference, technical information and criteria for the proper use of indicators based on citation in the evaluation of research. In September 2017, he published a second textbook entitled “Applied Evaluative Informetrics” (Springer). In addition, Henk Moed was a member of the editorial board of several journals in the field of research evaluation and co-editor of the prestigious “Handbook of Quantitative Science and Technology Research: The Use of Publication and Patent Statistics in Studies of S&T Systems” (Kluwer, 2004), and of the new edition of the “Springer Handbook of Science and Technology Indicators” published in 2019. Among other awards, he was the winner of the Derek de Solla Price Award in 1999, a prestigious award periodically awarded by the journal *Scientometrics* to scientists with outstanding contributions to the fields of quantitative studies of science.

Henk Moed has been working for several years with Sapienza University, where he has been visiting professor in courses for interdisciplinary graduate students, visiting scholar at the Sapienza School for Advanced Studies and where he collaborates in the development of various research projects at the Department of Computer, Control and Management Engineering Antonio Ruberti (DIAG) of Sapienza University. He was also an active contributor in the institutional activities carried out at the University with his

participation in the Board of Evaluation of the University during 2015–2017. Due to his high scientific profile, the scientific committee and the university organised a “Special Plenary Session in Honour of Henk F. Moed on: Evaluative informetrics – The art of metrics-based research assessment” as part of the ISSI 2019 International Conference, which was held at Sapienza University in September 2019, during which the book in his honour entitled “Evaluative informetrics - The art of metrics-based research assessment, Festschrift in honour of Henk F. Moed” (Springer, 2020) was presented.

On September 5th 2019, he received a Doctor Honoris causa from Sapienza university of Rome “In recognition of his fundamental scientific contribution to the development of Research Assessment methodologies which represents one of the areas of greatest interest and innovation in the field of research on the themes of the evaluation of the institutional activities of universities and research bodies”.

Henk has been active in numerous research topics related to bibliometrics, especially citation analysis, research assessment methodologies, journal indicators, university ranking, scholarly literature databases and altmetrics. In a late phase of his career, he decided to start up editorial work to bridge the still existing gap between theory and methodologically sound policy relevant application in research assessment. In 2019, Henk launched the Open Access journal “Scholarly Assessment Reports” (Levy Library Press) to publish articles from top researchers in various fields. The journal proved great success, publishing 27 full research articles on various topics pertaining to practical applications of bibliometrics to research evaluation. It was recently indexed in Scopus. The journal’s success was due to Henk’s diligence in approaching key researchers and engaging with researchers around the world. Unfortunately, we will never get to know the fruits and the full impact of his innovative endeavour in the last chapter of his professional life. With his sudden passing, our scientific community has lost one of its great leaders and most influential minds.

PETRE T. FRANGOPOL (1933—2020)

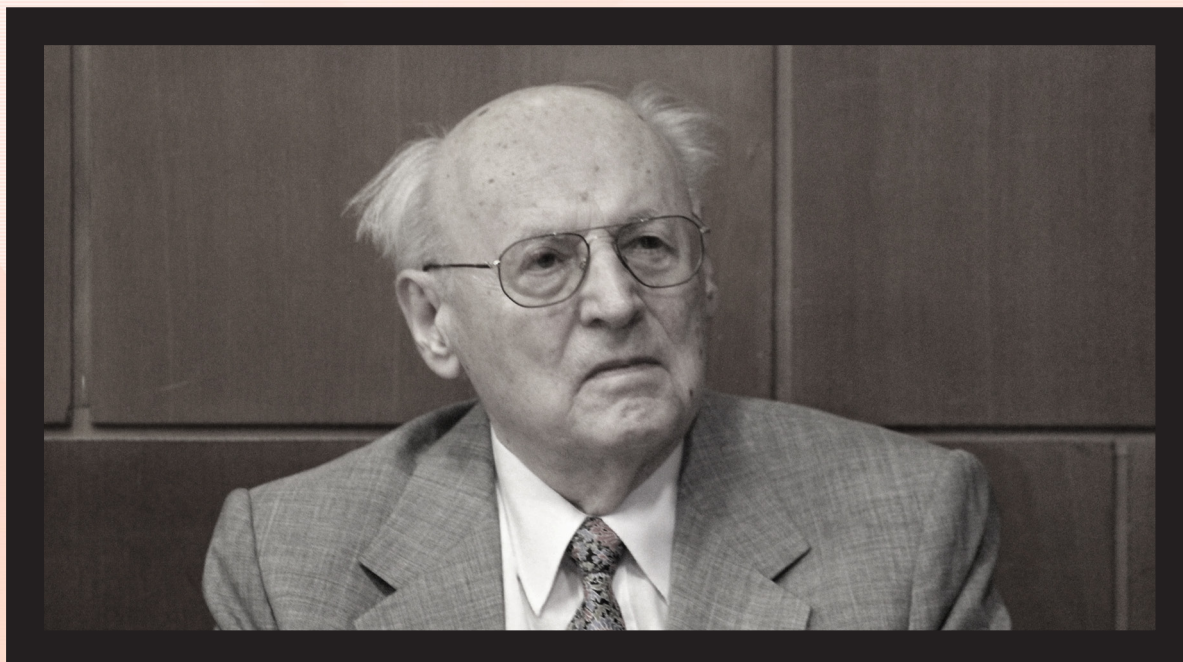
OBITUARY BY GHEORGHE BENGA

Romanian Academy, Cluj-Napoca Branch, Cluj-Napoca, Romania

Academy of Medical Sciences, Bucharest, Romania

School of Molecular Biosciences, University of Sydney, NSW, Australia

gbgbenga@gmail.com



Petre T. Frangopol was a brilliant Romanian scientist, the main promotor of Scientometrics in Romania, who unfortunately passed away in December 2020.

He was very proud of the Frangopol family *saga*. His parents were Greeks, descendants of inhabitants from a village in Bulgaria called Mesemvria (Nesebăr of today), who came in 1860 to Kiustengé (the Turkish name of Constanța, a city located in a historical region of Romania called Dobrogea, on the Black Sea coast) after an ethnic cleansing performed by Bulgarians. Petre T. Frangopol (Petrache for his friends) was born on 26 May 1933 in Constanța. As a child he enjoyed

the atmosphere of friendship with children from neighbourhood and the solidarity above ethnicity or religion. He received a solid and complex family and public education. His father told him: “...You have a Greek name, but you should know that you are Romanian, like your father, who fought in the First World War for this country, which you should love as much as me myself”.

Petrache studied at the oldest and most prestigious school for boys from Constanța. He graduated in 1951 and chose to become a chemist, following the example of some members of his family. He studied Industrial Chemistry at Iași Polytechnic Univer-

sity, graduating in 1956. He received his Ph. D. in 1968 at another prestigious university, Timișoara Polytechnic, working under the supervision of Giorgio Ostrogovich. Petre T. Frangopol recalled: "I have no idea how much I would have achieved in life if I would have not encountered the scientist Horia Hulubei".

In 1956 a new Soviet nuclear reactor (cyclotron) was installed in București-Măgurele, Romania becoming the 7th country in the world having a nuclear reactor. A new Institute of Atomic Physics (in Romanian Institutul de Fizică Atomică, abbreviated as IFA) was founded in București-Măgurele, under the aegis of the Romanian Academy. Academician H. Hulubei, a great scientist, became the first Director (1956–1968) and Founder of IFA. He solved the problem of education of personnel qualified in the field of atomic and nuclear physics by organizing a special one-year program of studies under the aegis of IFA in 1956–1957. Petre T. Frangopol was selected as a student in this program, being assigned to radiochemistry. New laboratories were set up at IFA: the Laboratory of Radiochemistry and Nuclear Chemistry (LRNC), the Laboratory of Radioactive Isotopes prepared in the Nuclear Reactor (LRNR) and the Laboratory of Labelled Organic Compounds (LLOC). The LRNC was founded by Dr. Silvia Ionescu, who had received her Ph. D. in physical chemistry from the Kaiser Wilhelm Universität. The LRNR, led by Professor Nachman, included a group of three chemists working in the cyclotron building. The coordinator of the group was Tiberiu (Tibor) Braun, who graduated in 1953 from Faculty of Chemistry, "Victor Babeș" University Cluj and worked at IFA between 1956–1963. The group obtained results in the top of the field, including the first article published in *Nature* by researchers from IFA. Petre T. Frangopol admired Tibor very much and maintained scientific and humane relations for all his life. In 1963 Tibor emigrated to Hungary, where he obtained his Ph. D. and D. Sc. degrees, becoming one of the greatest scientists in the world in the fields of chemistry and scientometrics. Petre was very happy to witness

the ceremonies of the award of DhC titles to Tibor by Romanian Universities: "Vasile Goldiș" Western University (UVVG) Arad, Technical University Cluj-Napoca). I was also very happy to witness the award of the title in Cluj-Napoca and to vote the election of Professor Tibor Braun as Honorary Member of the Romanian Academy. From 1957 to 1963 Petre T. Frangopol was Staff member, Laboratory of Organic Chemistry (chaired by Acad. Costin D. Nenițescu) at București Polytechnical Institute. Acad. Hulubei asked Petre to set up the LLOC, for the preparation of compounds labelled with radioactive iodine (^{131}I) and other isotopes.

Such a lab had not existed previously in Romania. Petre has not received an adequate space for the lab, but a huge empty room, a corridor in the basement. There it was installed a hood, projected by Petre and made by excellent craftsmen hired at IFA. After 7 months, for the first time in Romania the group succeeded to prepare ^{131}I (which later became widely used for treating diseases of the thyroid). The article describing the preparation was published in *Revista de Chimie (București)* and, to the surprise of the authors, has been translated in English and published in *International Chemical Engineering (USA)*. IFA became a multidisciplinary center of excellence. In the first 6 years after its foundation, over 80 scientific articles have been published by researchers at IFA. Petre T. Frangopol and Alexandru T. Balaban were among the best young researchers of IFA. They solved important problems, such as the preparation of stable free radicals for studies of Electron Spin Resonance (ESR): 1,1-diphenyl-2-picrilhydrazyl (DPPH), used as standard of the position and intensity of ESR signals and other stable free radicals, many of them with the essential help of Mioara Frangopol. Several articles were published in prestigious journals (*Tetrahedron*, *Journal of Chemical Society*, *Journal of Organic Chemistry*, *Isotopes and Radiation Technology*, *Revue Roumaine de Physique*, *Revue Roumaine de Chimie*).

The work on stable free radicals at IFA gained international recognition. Petre T. Frangopol obtained financial support for work in Canada (Post Doctoral Fellow, National Research Council, Ottawa, 1969–1970), USA (Post Doctoral Research Associate, with a NASA contract at the George Washington University, 1970–1971) and Germany (Dozentenstipendium, Humboldt Foundation, 1972). He was cited in many articles in journals and books, and was also invited to give lectures at scientific events, universities, and institutions around the world: USA, Germany, Sweden, France, Belgium, Slovakia, Greece, former USSR etc. He declined many offers to settle down abroad and returned to IFA as Chief of the lab he had founded and equipped by international standards. Unfortunately, his lab was completely destroyed by fire during the 1977 earthquake. In 1976 IFA was reorganized, the Labs of Physics became institutes and the name of IFA was changed to “Horia Hulubei” National Institute for Research & Development in Physics and Nuclear Engineering (in Romanian Institutul de Cercetare-Dezvoltare pentru Fizică și Inginerie Nucleară „Horia Hulubei”, abbreviated as IFIN-HH).

The second working period of Petre T. Frangopol at IFA has begun (1977–1990). He organized a Center of Radiochemical Production, starting again everything from scratch. Petre T. Frangopol later extended his activity from organic physical-chemistry and radiochemistry to biophysical chemistry and biophysics. He was the editor of the first annual publication of biophysics in Romania: *Seminars in Biophysics* (6 annual volumes, 1985–1990). He managed an extended program of biophysical studies on the interaction of medicines with cell membranes, financed by the Ministry of Chemical Industry. I met Petre T. Frangopol for the first time in 1976, when he came to the Department of Biochemistry, Faculty of Medicine, “Iuliu Hațieganu” University of Medicine and Pharmacy (UMF), Cluj-Napoca, where I was a young

Lecturer. Petre introduced himself as the leader of a group of researchers from IFA and made a proposal to collaborate with him. He had heard that I had just returned from UK, after 12 months of post-doc work in the lab of Professor Dennis Chapman, a well-known scientist in the field of biomembranes. I studied protein-lipid interactions in biomembranes using techniques such as NMR, spin label ESR etc. I was honored that such an outstanding scientist as Petre T. Frangopol was inviting me to collaborate with him. After visiting his lab in București-Măgurele, I realized that actually at IFA there was the “Professor Petre T. Frangopol and Dr. Mioara Frangopol group”. Petrache was really a world-class scientist; however Mioara also impressed me deeply, by her competence as a scientist, by her intelligence and by her humane qualities. A very fruitful collaboration started between the “Frangopol group” in București-Măgurele and my group at UMF Cluj-Napoca (where I became in 1978 Chief of the new Discipline of Cell Biology – DCB). We published many papers over several decades. In addition, it was the chance of becoming close friends to Petrache Frangopol. I have learnt from him how to write the applications to obtain grants in Romania. Using such funding I succeeded to buy an NMR spectrometer and an ESR spectrometer produced at IFA. Petre T. Frangopol helped us in setting up the lab for work with radioactive compounds. He played an important role in our collaboration with an American group led by Professor Fred A. Kummerow (Burnsides Research Laboratory, University of Illinois at Urbana-Champaign), a chemist who discovered the atherogenic effects of trans fatty acids. I performed my first research visit to USA invited by Fred Kummerow. We organized a workshop in New York supported by The New York Academy of Sciences and later we obtained a grant from the National Science Foundation (NSF) for collaborative work. Using such funding we bought the radioactive compound with which we

performed the crucial experiment proving the presence in the human red blood cell membrane of a water channel protein (later called aquaporin₁). Ross Holmes, a coworker of Fred, came to Cluj-Napoca and collaborated with us in the crucial experiment. The results were reported in two landmark papers published in 1986 by our group in well known international journals in USA and in Europe.

In 1988 the protein was rediscovered by an American group led by Peter Agre, who purified the protein by chance, having no idea of its function. Only in 1992 the American group discovered the function of that protein as a water channel; however, they have not cited the two papers previously published by Benga's group. In 2003, Peter Agre was awarded the Nobel Prize in Chemistry. Petre T. Frangopol fully supported the campaign for the recognition of the priority of Benga's group in the discovery of the first water channel protein before Peter Agre's group.

Based on his experience at IFA, from 1991 to 1999 Petre T. Frangopol was invited as Professor of Biophysics and Medical Physics at the University "Alexandru Ioan Cuza" (UAIC) Iași. He founded two new labs at UAIC: the Laboratory of Medical Physics (the first such lab in Romania), and the Laboratory of Biophysics. Petre T. Frangopol obtained funding from the International Atomic Energy Agency, from programs of the European Union etc. He edited 6 annual volumes (1992–1997) of *Current Topics in Biophysics*, with authors from 13 countries, to provide scientific literatures for the bachelor's degree students. He sent his students abroad, to perform experimental work for their Ph. D. degree. Some of the graduates of his Section of Biophysics became professors at well-known universities. Petre T. Frangopol continued his academic career from 1999 to 2002 at "Babeș-Bolyai" University Cluj-Napoca as Professor of Biophysics and Biophysical Chemistry (Faculty of Chemistry), at UVVG Arad (Faculty of Medicine) and

from 2002 to 2004 at Polytechnica University București (Department of Physics). Over the years he initiated and organized or co-organized many scientific events: multidisciplinary seminars at IFA; four national conferences of the chemical physics program (1986–1989, Iași, Cluj-Napoca, București); the 8th workshop "Balkan Days of Biochemistry and Biophysics"; two Romanian Conferences on the Application of Physics Methods in Archaeology, Cluj-Napoca (1987, 1989); seminars on Romanian original drugs.

P. T. Frangopol was a prolific author. He was author, editor, redactor of dozens of publications (articles, conference proceedings, biographies, in 3 languages) which are found in 98 library holdings. He received many prizes and distinctions: the "Constantin Miculescu" Prize of the Romanian Academy (1990), the "Horia Hulubei" Diploma (2006), Honorary Professor of UMF Cluj-Napoca (2008), Diploma of Excellence (University of Bucharest, 2018). He was elected Honorary Member of the Romanian Academy in 2012 and Honorary Citizen of Constanța (2019). I will be grateful to him all my life, considering the scientific publications we accomplished, the support and competent advice he gave me along the decades. Petrache will be greatly missed by all academics, scientists, former students, friends, who had the pleasure of interacting with him. I also express again deep regrets for the greatest loss of his life, the death of his beloved wife, Mioara Frangopol. She stood shoulder to shoulder to Petrache for 58 years until she passed into eternity. She put her whole life at the service of the harmony of their marriage and of his career.

ACKNOWLEDGMENTS

I thank to the daily newspaper *ZIUA de Constanța* and Mrs. Adriana ROȘU (Editorial Secretary) for sending me the photograph of Petre T. Frangopol and the agreement to be published in the *ISSI Newsletter*.

THE 26th NORDIC WORKSHOP ON BIBLIOMETRICS AND RESEARCH POLICY IN ODENSE, DENMARK

A REPORT BY

CHARLOTTE WIEN², BERTIL F. DORCH² & MARIANNE GAUFFRIAU^{1,2}

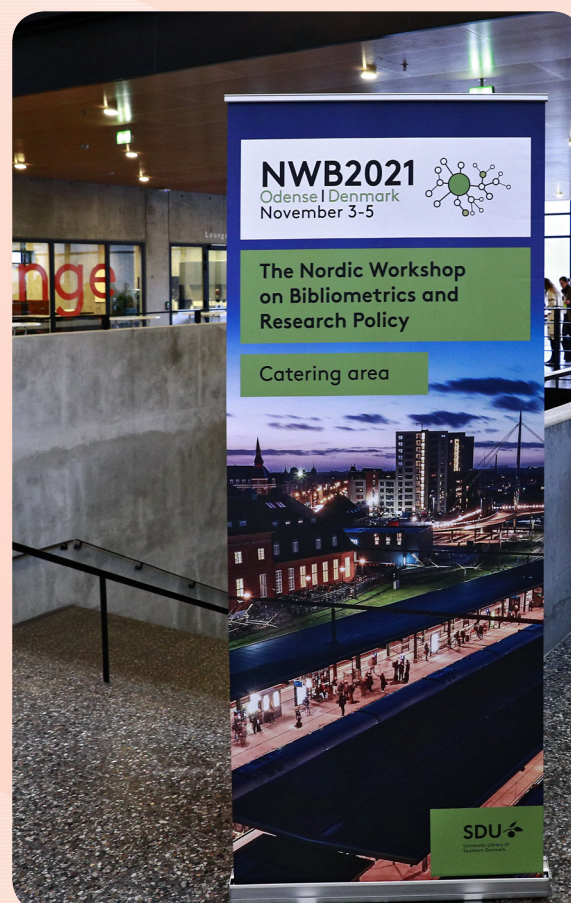
¹ IT University of Copenhagen, Denmark

² University Library of Southern Denmark, Denmark

PROLOGUE

In 2008, Jens Oddershede, the Rector of the University of Southern Denmark at the time, sent an e-mail that encouraged all employees to participate in what was described as a 'value process'. The purpose of the process was to distil three key values, which would reflect the organization. After many meetings, three words were selected: Trustworthy, Innovative, and Holistic. Oddershede had a coffee mug produced with those terms printed on it, and every employee got one as a present.

During lunch breaks, the researchers would discuss this 'corporate style management' and the apparent attempt to introduce a structure of incentives that the private sector had. Some of us refused to be influenced by management theories, thought that we knew better. Our arrogant attitude in this instance showed how little we realized the significance of that coffee mug. The 'values mug' was one of the first physical proofs that



© University Library of Southern Denmark

New Public Management (NPM) had begun its rage at Danish universities.

The planning of the program for the 26th Nordic Workshop on Bibliometrics and Research Policy started in early 2021 with one of us reading an article that analyzed NPM's role in academia. The article – with its all too familiar examples – resonated well with the current situation at Danish universities.

THE 26th NORDIC WORKSHOP ON BIBLIOMETRICS AND RESEARCH POLICY

The University Library of Southern Denmark had the privilege of hosting the 26th Nordic Workshop on Bibliometrics and Research Policy (NWB2021) on 3-5 November, 2021, in Odense, Denmark. It was an in-person event with 120 participants from 21 countries. The NWB2021 was supported by international and local sponsors: Digital Science, Clarivate, Elsevier, Anarkist, Odense Marcipan, and Hattesens Konfekt-fabrik. See the NWB2021 webpage: <https://www.sdu.dk/nwb2021> and pictures from the workshop: <https://www.flickr.com/photos/nwb-and-rp/albums/72157720128843909>

KEYNOTE SPEAKERS

The keynote talks at the NWB2021 were not about bibliometrics as such but addressed related topics to inspire research and practice in bibliometrics.

CHRIS LORENZ

Back to the prologue. The first of three keynote talks was titled 'The Strange Non-Death of New Public Management' and was delivered by Chris Lorenz from Institute for Social Movements, Ruhr-University Bochum, Germany.

NPM is a management approach that intends to enhance efficiency in the public sector. It is based on a philosophy of 'managerialism' and 'neoliberalism'. Competition

and cost-efficiency are the guiding principles for resource allocation. NPM does not allocate resources according to principles like equality and social justice but channels them to the most efficient units instead.

When resources are allocated to those units that are most efficient, there is a strong focus on identifying the most productive units, and on what the goals for efficiency should be. These goals must be simple and transparent, so that the management can justify the allocation internally and refer to them externally when documenting to taxpayers, media, and politicians, that their 'production processes' are efficient.

Lorenz in his talk argued that NPM in academia is problematic because performance measurement cannot fulfil its claim to eliminate the 'subjectivity', the complexity, and the ambiguity of qualitative data. Therefore, there are good grounds to return to professional research evaluation alias judgment by peers.

GEMMA DERRICK

The second keynote speaker was Gemma Derrick from Department of Educational Research, Lancaster University, UK. Derrick as a PhD student presented her work at the NWB, and it was a pleasure to welcome her back.

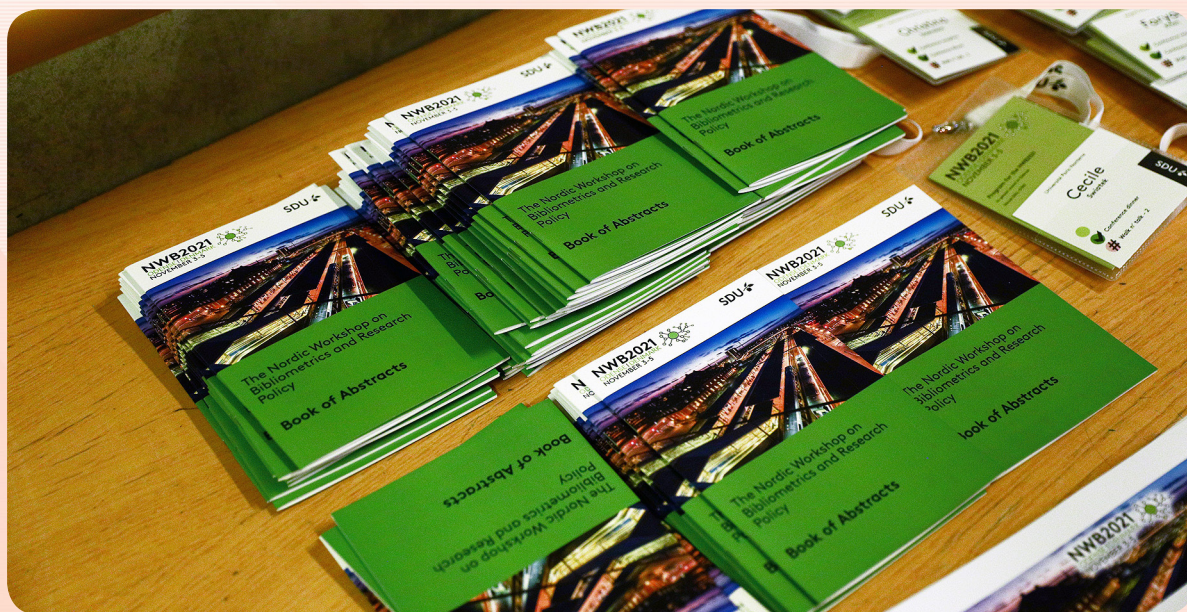
Derrick's talk was titled 'Mapping the career choices and consequences after first failure' and proposed the Derrick-Klavans hypothesis. The hypothesis says that early-career researchers (ECR), who unsuccessfully applied for a grant but received reviewer feedback offering support and guidance, are more likely to successfully stay in academia than ECRs who receive vague feedback or ECRs who just barely got the grant.

Peer review treats senior researchers and ECRs in the same way. For ECRs, however, the consequences of failure are far more severe. Knowledge about ECRs' responses to peer review may be incorporated in the peer review system, making the system more sensitive to the ECRs' needs.

Derrick suggested to change the perspective of peer review as a selection mechanism



© University Library of Southern Denmark



© University Library of Southern Denmark



© University Library of Southern Denmark



© University Library of Southern Denmark



© University Library of Southern Denmark

ditorium. Some of the posters are available here: [NWB'2021 Posters \(figshare.com\)](https://figshare.com).

INFORMAL PROGRAM

The informal part of the program featured a welcome reception with beer tasting at a local award-winning brewery and, the next day, an art-walk competition at University of Southern Denmark. The winning team was awarded 'kravlenisser', traditional Danish Christmas decorations.

The workshop dinner was held at Golden Palace, a Turkish function room with classic decoration and colorful lighting, which formed a nice contrast to the gray November weather. After the dinner a belly dancer entertained and invited the

workshop participants to join a belly dancing battle. Several participants took up the challenge and impressed the rest of us with their dance moves.

EPILOGUE

After corona lockdowns and travel restrictions it was pleasure to be able to host an in-person workshop and meet with international colleagues. We, the organizers, had a bit of a post-NWB2021 blues going home after the last session. Thank you to all presenters, participants, and sponsors that made NWB2021 such a great experience. We are looking forward to NWB2022 in Turku, Finland. To be continued: <https://sites.utu.fi/nwb2022/>

INTRODUCING BAJIMACRO

A CONCISE SOFTWARE REVIEW



FATIMA BAJI

Ahvaz JundiShapur University of Medical Sciences, Ahvaz, Iran
 baji245@gmail.com

ABSTRACT

This software add-on provides an excel macro for generating co-occurrence matrices based on tools created and made publicly available by Loet Leydesdorff.

BAJIMACRO

Examining the relationships of keywords and author names is a common way to measure the relationship between documents and authors (Callon, Courtial, & Laville, 1991); in scientometrics, this is called co-word and/or co-authorship analyses. This method analyzes term and name occurrences in scientific texts. Although there are various open-source software tools for measuring co-occurrence of words (co-word) and author names (co-authorship) such as Bibexcel, SciMAT, CiteSpace, etc., sometimes limitations in the use of such software cause researchers to look for alternative solutions. Some of these limitations are

- ▶ Limits in extracting data from a specific database, such as Scopus or Web of Science databases
- ▶ Limits in saving a number of records from the database, for example up to 1024 fields or records, etc.
- ▶ Limitations in the analysis and measurement of desired metrics in some software, such as VOSviewer, etc.
- ▶ Time required to learn how to work with the scientometric software
- ▶ Manual pre-processing of data required

Considering the above mentioned points, I decided to create a simple Microsoft Excel Macro for generating symmetric co-occurrence matrix using Visual Basic as the programming language, which is available

BajiMacro consists of three macros: first one prepares co-occurrence list of the records, second one generates the primary co-occurrence matrix, and the third one process the final co-occurrence matrix. The resulting

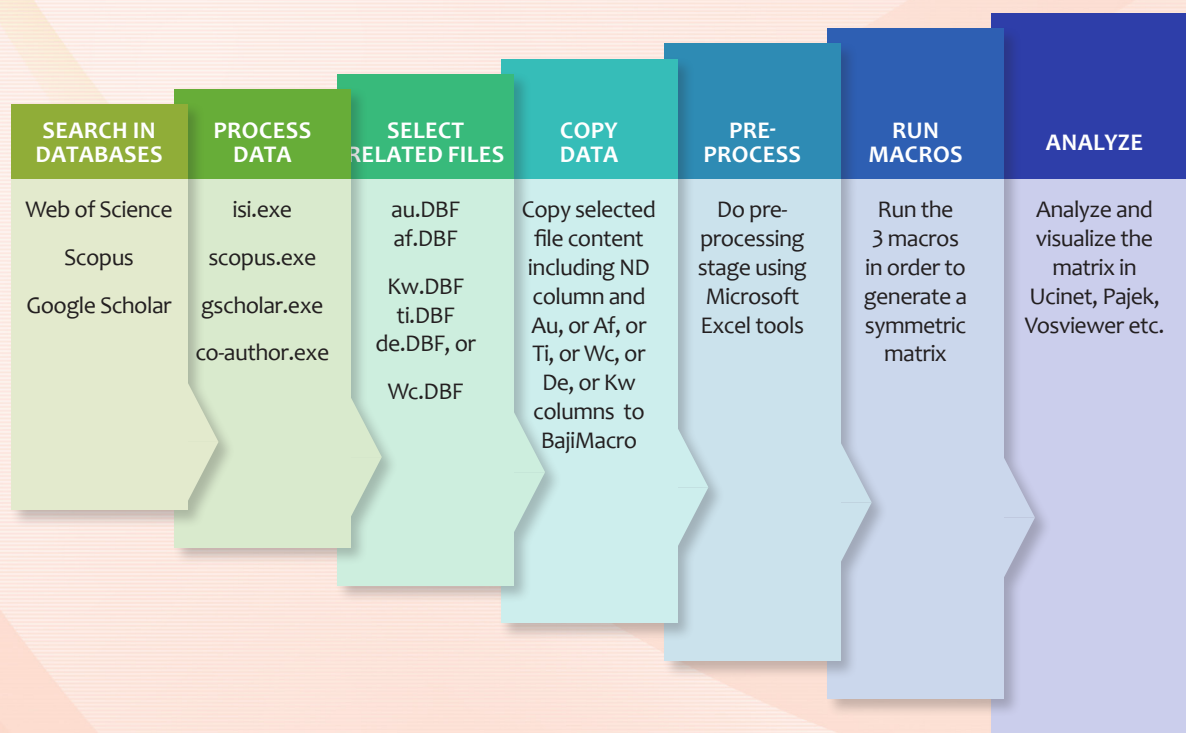


Figure 1: BajiMacro workflow

at: https://figshare.com/articles/software/BajiMacro_How_to_work_with_BajiMacro_pdf/17306366

I called this macro “BajiMacro”. It works with files extracted from the following software created and provided by Loet Leydesdorff (since the mid-80s; see: Leydesdorff, 2017): ISI.exe, Scopus.exe, Co-author.exe, Bibcouple.exe, and Gscholar.exe. Among the extracted files from the above-mentioned software, the files which can be used to generate co-occurrence matrices are the following:

- ▶ Au.DBF for creating co-author matrix
- ▶ af.DBF for creating international collaboration matrix
- ▶ Kw.DBF, ti.DBF, de.DBF, and Wc.DBF for creating co-word matrix

matrix can be analyzed and visualized using software such as Ucinet, Vosviewer, Pajek, etc. Figure 1 shows BajiMacro’s workflow.

As mentioned earlier, data extracted from software such as isi.exe are first copied into BajiMacro. The pre-processing step can be performed manually by the researcher using the Microsoft Excel tools, which may be more familiar for users. Pre-processing includes removing duplicates, counting frequencies, standardizing word spelling, and integrating keywords or words into more general topics for co-word analysis.

In scientometric research sometimes it is most important for the researcher to perform the pre-processing step manually because he/she will be able to identify records or data that are not suitable for analysis. As a result, it can be said that the data controlled and prepared by the researcher are more ac-

curate and reliable for scientometrics analysis. This issue is especially important in co-word analysis of the author's keywords. In many cases the number of author keywords extracted from scientometrics software such as isi.exe, scopus.exe, bibexcel, etc. is large. In such cases, the co-word software analyzes the keywords based on the frequency. As a result many keywords that have low frequency but related to other high frequency keywords are removed from the analysis, even though these keywords are themselves serve as an emerging domain.

Keywords can be counted and integrated with other major keywords using thesauruses, this can provide a more comprehensive analysis. However, there is no software yet that can do this automatically; so it is possible to do such vocabulary control with human intervention. Creating macros along with other available open-source software for scientometrics research projects can help to reach this goal.

ACKNOWLEDGEMENTS

I would like to put my special regards to professor Loet Leydesdorff who reviewed and supported BajiMacro.

REFERENCES

- Baji, F. (2021), Callon, M., Courtial, J. P., Laville, F. (1991), Co-word analysis as a tool for describing the network of interactions between basic and technological research: The case of polymer chemistry. *Scientometrics*, 22, 155–205.
- Hellsten, I., Opthof, T., & Leydesdorff, L. (2020). N-mode network approach for socio-semantic analysis of scientific publications. *Poetics*, 78, 101427.
- Leydesdorff, L. (2017), *Alphabetic overview of software (October 2017)*. Accessible at <https://www.leydesdorff.net/software/index.htm>.