



What to integrate within Research Information System

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Warsaw University of Technology

Our experience

- OMEGA-PSIR has been developed in 2013 at the Institute of Computer Science, Warsaw University of Technology
- Up to now it has been successfully deployed in over 40 Polish universities, and one Bulgarian.



OMEGA-PSIR

Omega-PSIR in the Directory of RIS

dspacecris.eurocris.org/cris/explore/dris



Discover

Country

India	630
Norway	132
United Kingdom	83
Italy	78
Spain	61
United States	60
Poland	51
Germany	40
Turkey	38
Netherlands	23
next >	

Software

IRINS	629
Pure	187
CRIStin	131
In-house-built	81
IRIS	70
Omega-PSIR	48
Symplectic Elements	45
DSpace-CRIS	42
Avesis	32
Dialnet CRIS	29
next >	

Status

Operational	1376
Under Construction ...	25
Closed ...	2



OMEGA-PSIR

Open Access IR + RPS + CRIS

Institutional Research Knowledge System

Institutional Repository
Researcher Profiling System
Current Research Information System

Open Access Repositories – the discussion has started some 20 years ago

Innkeeper at the Roach Motel, 2008 by Dorothea Salo:

„The institutional repository is like a roach motel. Data goes in, but it doesn't come out”

... and is still being continued:

Innkeeper at the roach motel

[D Salo](#) - Library Trends, 2008 - [muse.jhu.edu](#)

Library-run institutional repositories face a crossroads: adapt or die. The “build it and they will come” proposition has been decisively proven wrong. Citation advantages and ...

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8 in 2024

Open Access Repositories – the discussion has started some 20 years ago

Conclusions from the literature

1. Low acceptance among researchers – many researchers view IR as useless and not important – RPS to the rescue
2. For the University the role of IR is of a very high importance, though the main motivation seems to be more prestige, than real advantages
3. ... of very high importance, but still IR is not business-critical system – it is mission critical one – CRIS to the rescue
4. IR does not help in reducing disintegration of the University researchers – RPS to the rescue

Researcher Profiling Systems for Knowledge Sharing

RPS are more like a social network – they help researchers to find partners.

Opposite to IR systems, RPS are the systems that have much higher acceptance among the researchers, as they provide means to get a better knowledge on who is who at the University.

A good example of institutional RPS is [Vivo](#) (2010)

Still RPS alone is not a business-critical system at the university

Current Research Information System for Research Management

Opposite to Open Access IR and RPS, CRIS are the systems that become indispensable from the point of view of the research management at the University.

But all those systems

Open Access IR, RPS and CRIS are based on bibliographies

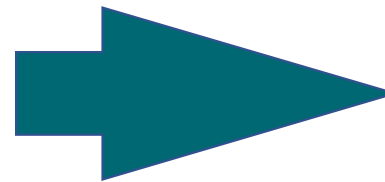
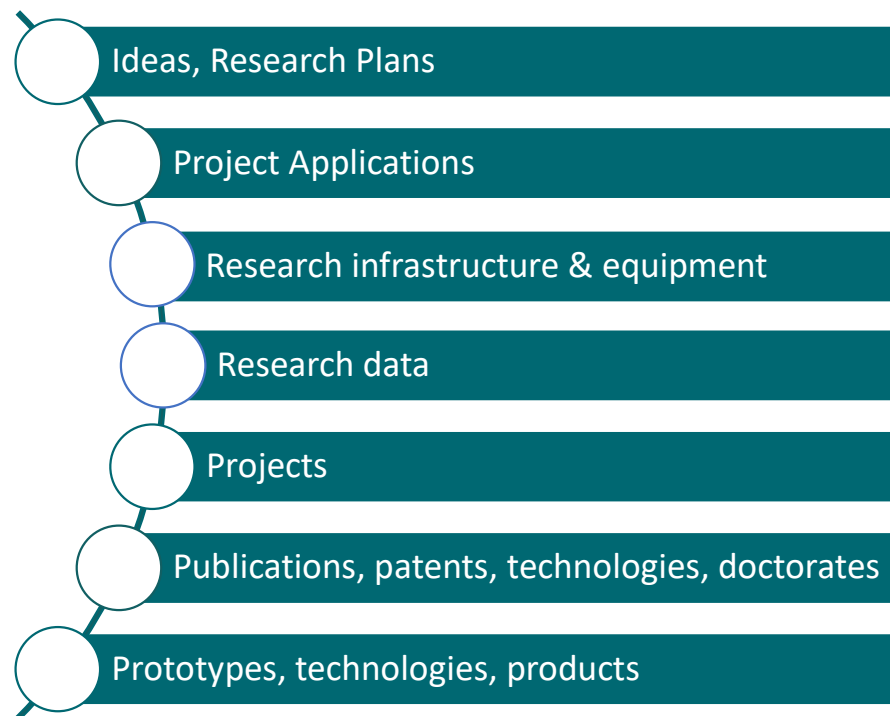
[+ sources],

which is the most expensive part of the cost for running the systems

... why not to integrate them into one?



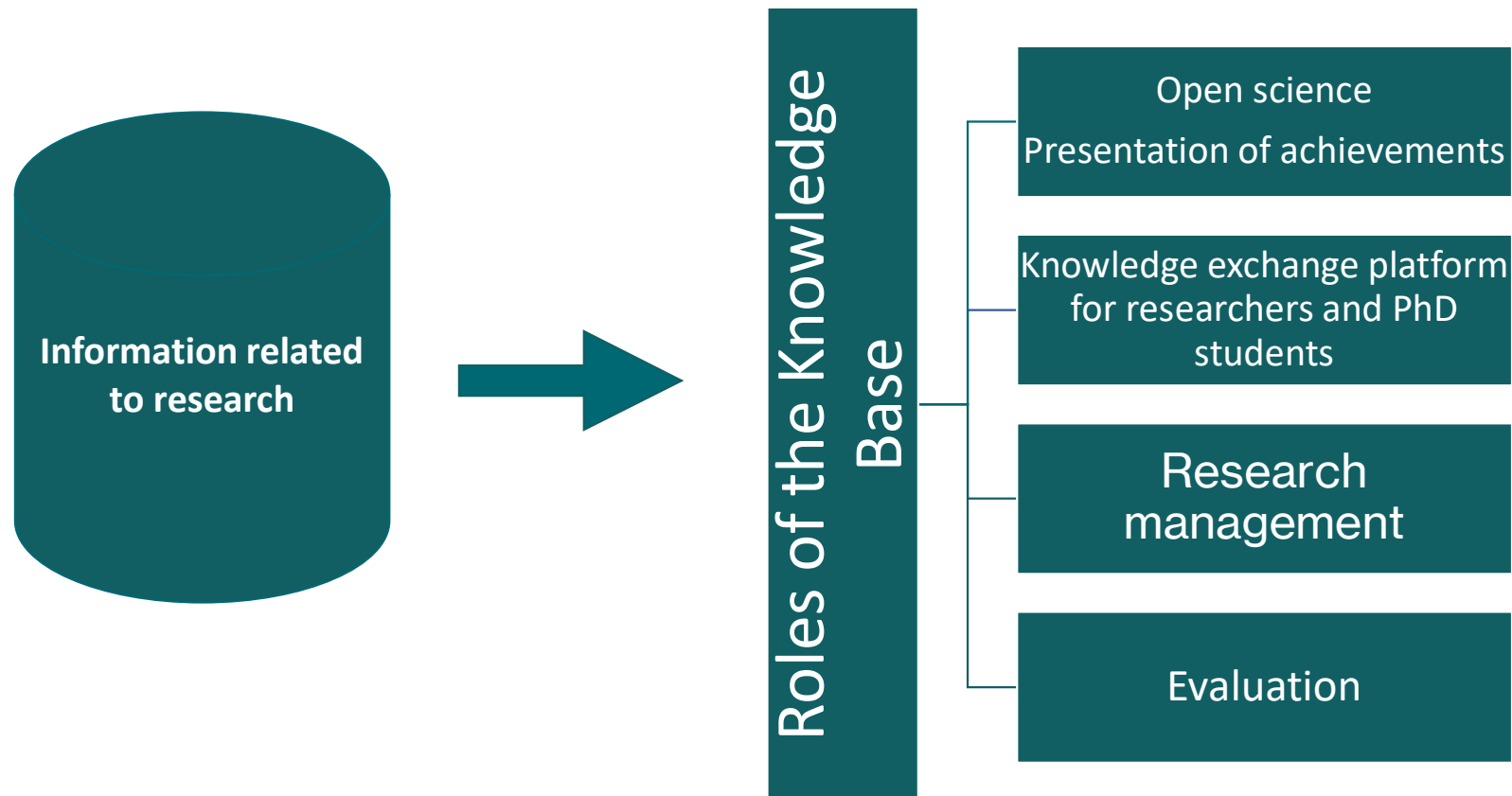
The OMEGA-PSIR system covers data referring to the entire research process



Information related to research

- Scientists, Units, Teams
- Project Applications
- Projects
- Publications, PhDs
- Research data
- Patents
- Activities, achievements
- Infrastructure, equipment
- Products, technologies
- Research plans
- Journals, Conferences
- Media, Press, Events
- Didactic materials

Roles of the Knowledge Base



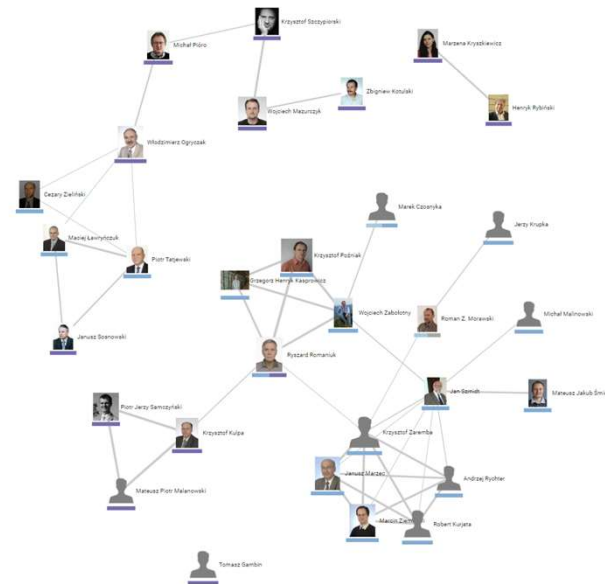
unlike IR roach motel

Satisfies needs of many actors

1. Researchers (internal and external)
2. Management
3. Marketing department
4. Intellectual property specialists (patents, technologies)
5. Support office for research projects
6. PhD office
7. Research evaluation bodies
8. Awards committees
9. International cooperation office
10. Librarians

What we have in the Knowledge Base

1. High-quality data related to research connected to external systems (scopus, wos, ror, orcid)
2. Presentation and visualization tools with auto-generated profiles
3. Tools for analytics and reporting



Interconnected
information related
to research

searching

- Full-text search
- Faceted
- Semantic filtering
- User defined queries (with gui and query language)
- Alerts
- Explainable results
- Persistent Identifiers

and ☐ or ☐ not ☒ author rybinski

and ☐ or ☐ not ☒ journal / series

and ☐ or ☐ not ☒ project

+ Author and author's role

type of not published material

System fields

words from document
author
title
other contributor
author's science discipline
keywords
conference
journal / series
project type / program
project

Publication type

☐ Edited books (105)
☐ Authored books (426)
☐ Book chapters (115)
☐ Papers from journals (1074)
☐ Not published materials (3)

author/activityDiscipline/activityPercentage<75

Search   Clear (2)

Form of publication

☐ Complete work (2016)
☐ Abstract (1)

Matching with the query

Abstract in English:....atabase. Several search space pruning techniques are also proposed. Due to lack of unconnected **graph mining** algorithms we compare our algorithm with two general techniques which make unconnected **graph** discovery possible by means of connected **graph mining** algorithms. We also perform undirected comparison of our algorithm with connected **graph mining** algorithms by comparing the number of discovered f...

Keywords in English: **graph** mining, unconnected frequent graphs

Title: **Mining** for Unconnected Frequent Graphs with Direct Subgraph Isomorphism Tests

profile pages

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Disciplines
Teams
Projects

Like in RPS



Henryk Rybiński, PhD, DSc, Professor

Professor

The Institute of Computer Science 

Faculty of Electronics and Information Technology 

Email: Henrykrybinski@p.edu.pl

knowledge discovery scientific inform...
artificial intell... artificial intell...
pattern recognition
information systems
data analysis
text mining
web mining
text processing
education
algorithms
data mining
databases
general science &...
system architecture
software engineering
web intelligence
information reposit...
information retrie...
rough sets
web
bazy danych



Profile Publications Promoted theses Projects Projects (archive) Activities Achievements Citations Statistics Cooperation Evaluation

☐ Include multi-center publications

Edit

Add research data Add journal paper Add book chapter Add book Import publications

Other email addresses:
hrb@ii.pw.edu.pl

Phone:
+48 22 234 77 31

Room no:
304

Consultations:
Monday 14:00-16:00

Achievements summary

Researcher Report

Publications	149
Supervision	59
Participation in projects	10
Participation in projects (archive)	61
Professional activity	11
Professional achievements	6
Products	1

Career

Professor	2001
Professor Assistant	1988
Doctor	1974
Master Of Science	1970

Bibliometry*

h-index (Scopus Citations)	11
h-index (WoS Citations)	8
Total IF	25.533
Total SNIP	33.6
Total CiteScore	—
Total MNISW score	910

Identifiers

 <https://orcid.org/0000-0002-2890-7080> 

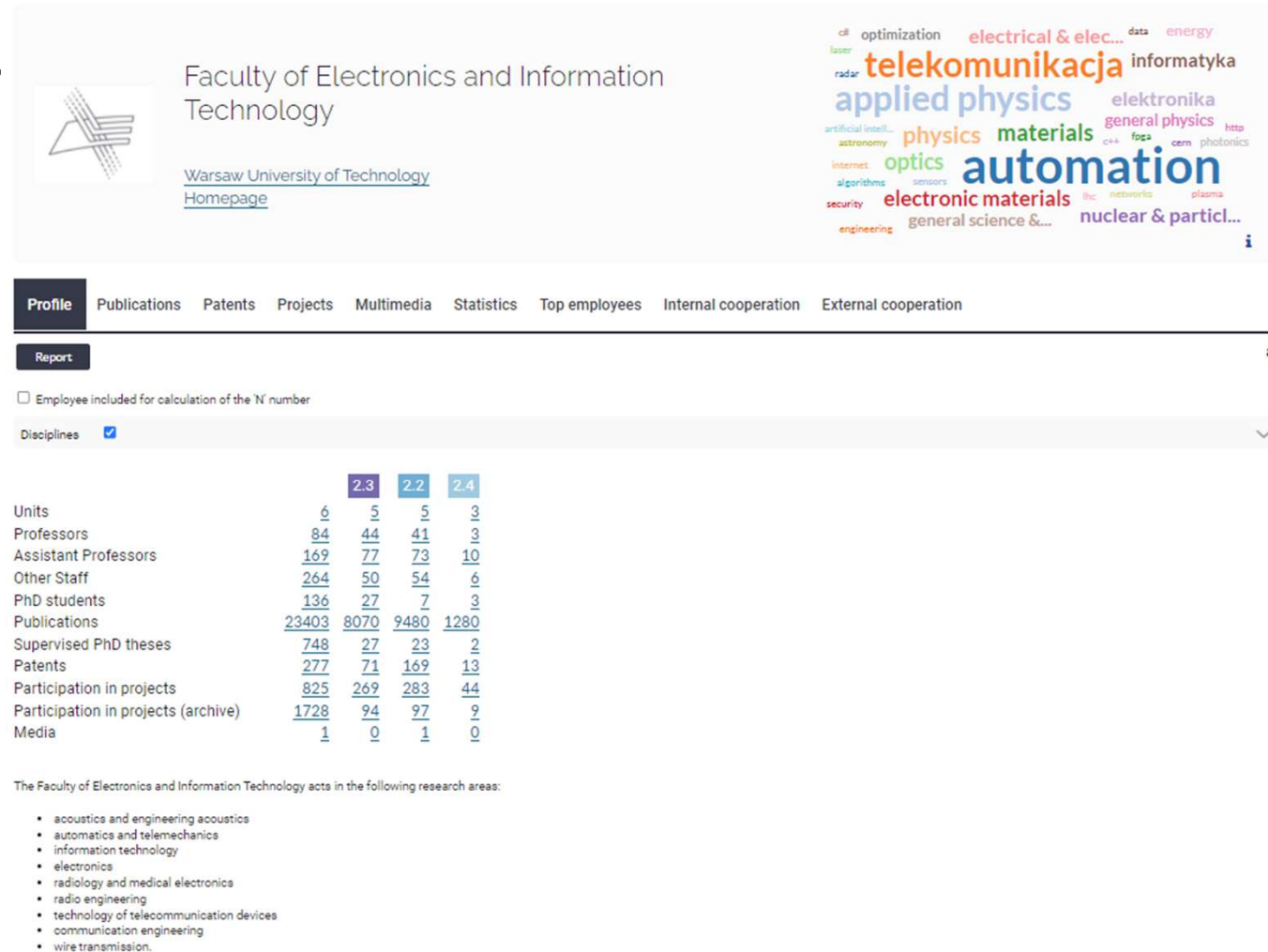
[Google Scholar profile](#)

[Scopus profile](#) [Status Scopus](#)

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Institution profile

Technical University of Vienna (TUW)

[Homepage](#)

Austria, Vienna

Scientific unit, Educational institution

Renowned university



Publications (38) Projects (5) Cooperation

Number of records: 38

☐ Open Access (2)

☐ Deposited in the repository (8)

Publication type

☐ Edited books (2)

☐ Authored books

☐ Book chapters (7)

☐ Papers from journals (29)

☐ Not published materials

Form of publication

☐ Complete work (38)

☐ Abstract

Years

☒ year ☐ range

☐ 2022 (2)

☐ 2021 (1)

☐ 2020 (1)

☐ 2019 (2)

☐ 2018 (1)

☐ 2017 (1)

☐ 2016 (3)

☐ 2014 (2)

More

Authors

☒ author ☐ search

☐ Wojciech Świąszkowski (9)

☐ C. Hellmich (7)

☐ Marek Wasiucionek (7)

☐ A. Dejaco (5)

☐ Jakub Jaroszewicz (5)

☐ Anton Friedl (3)

☐ Barbara Ostrowska (3)

☐ Guido Zacchi (3)

More

Order by: year/type/author

Change format

Export as: List

2022 [2]

Chapters from monograph

☐ Novel MXenes-Advanced Synthesis and Tailored Material-Property Design >

Jastrzebska Agnieszka (FMSE/DSMP), Grützmacher Philipp G., Rosenkranz Andreas, In: Fundamental Aspects and Perspectives of MXenes / Mohammad Khalid Andrews, Nirmala Grace Arunachalam, Arulraj Arshid Numan (eds.), 2022, Springer Cham, pp.325-355, ISBN 978-3-031-05006-3. DOI:10.1007/978-3-031-05006-0_13

Papers from journals

☐ MiDAS 4: A global catalogue of full-length 16S rRNA gene sequences and taxonomy for studies of bacterial communities in wastewater treatment plants >

Dueholm Morten Kam Dahl, Nierychlo Marta, Andersen Kasper Skytte [et al.], Nature Communications, 2022, vol. 13, no. 1, pp.1-15, Article number:1908. DOI:10.1038/s41467-022-29438-7

2021 [1]

Papers from journals

☐ The Extended Concept of the Map in View of Modern Geoinformation Products >

Gotlib Dariusz (FGC/DC), Olszewski Robert (FGC/DC), Gartner Georg, ISPRS International Journal of Geo-Information, 2021, vol. 10, no. 3, pp.142. DOI:10.3390/ijgi10030142

2020 [1]

Papers from journals

☐ Layer approach to ownership in 3D cadastre in the case of underground tunnels >

Karabin Marcin (FGC/DCLM), Kitsakis Dimitrios, Koeva Mila [et al.], Land Use Policy, 2020, vol. 98, pp.1-12. DOI:10.1016/j.landusepol.2020.104464

2019 [2]

Edited books

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Technical University of Vienna (TUW)

[Homepage](#)

Austria, Vienna

Scientific unit, Educational institution

Renowned university



Publications (38) Projects (5) **Cooperation**

Number of People: 50

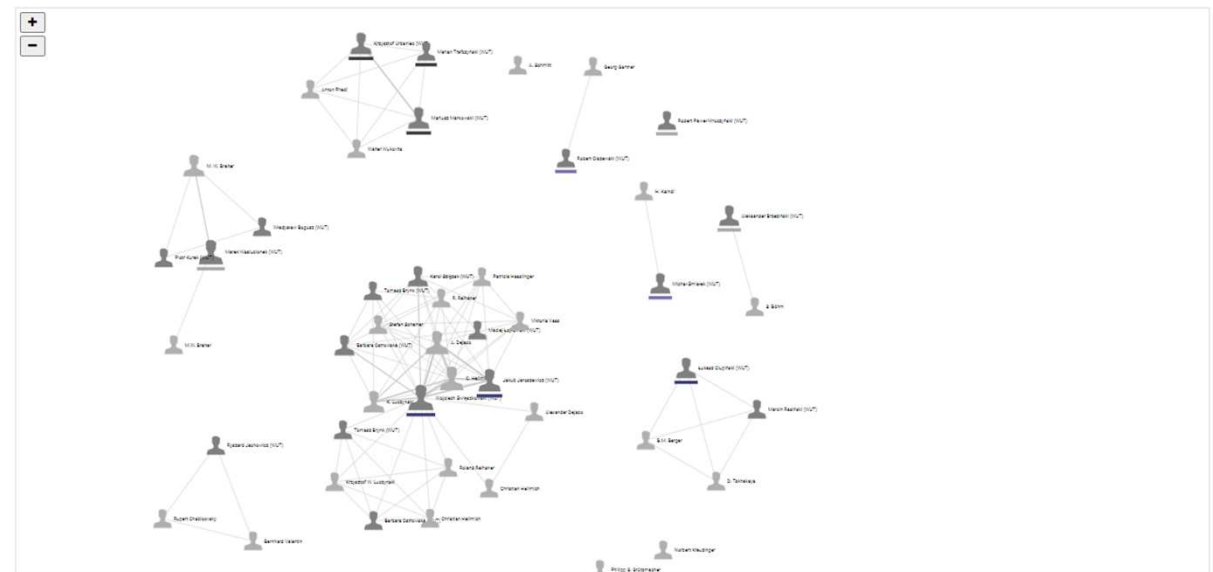
☒ Display names ☒ Display disciplines

☐ mechanical engineering ☐ physical sciences ☐ materials engineering ☐ civil engineering, geodesy and transport
☐ automation, electronics, electrical engineering and space technologies ☐ information and communication technology

cooperation threshold



cooperation period: 1994-2022



Text version

Last update: 11/05/2024 21:19

Limit

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Project profile

European Research Infrastructure on Semiconductor Chips (INFRACHIP)

Project leader at WUT: Piotr Wiśniewski (CAMT)

InfraChip is to implement the first integrated, distributed research infrastructure as a wider European research platform for the sustainable development of next-generation and future semiconductor chips. InfraChip will mobilise a critical mass of people, expert knowledge and technology blocks, and capital investment on state-of-the-art equipment to address the EU's twin digital and green transition and ensure Europe's capacity to innovate at the early to medium readiness levels. Building on...

Beginning date: 01-01-2024

End date: 31-12-2027

Keywords: Semiconductor, Flexible electronics, More than Moore, Beyond CMOS

Scientific discipline: management and quality studies (MQS): 100% N

Basic information

Project team PW

Consortium

Description

InfraChip is to implement the first integrated, distributed research infrastructure as a wider European research platform for the sustainable development of next-generation and future semiconductor chips. InfraChip will mobilise a critical mass of people, expert knowledge and technology blocks, and capital investment on state-of-the-art equipment to address the EU's twin digital and green transition and ensure Europe's capacity to innovate at the early to medium readiness levels. Building on existing RI communities, namely ASCENT+ on Nanoelectronics, EMERGE on Sustainable Flexible Electronics and EnABLES on Powering the Internet of Things (IoT), the InfraChip initiative will advance the state-of-the-art by supporting comprehensive user projects for multi-and-transdisciplinary path-finding research on sustainable Information and Communications Technologies (ICT).

These challenge-driven projects will target the introduction of new materials, proof-of-concept and feasibility studies of new manufacturing processes or disruptive technologies. To accelerate the translation of results from the lab to the fab, InfraChip will channel project activities to Testing and Experimentation Facilities, European Digital Innovation Hubs and Pilot Lines. InfraChip will also develop talent and train a skilled workforce through its Research Accelerator Programme and additional hands-on courses and education resources to support early career innovators and the high-value semiconductor industry. As a whole, InfraChip will significantly contribute to research and innovation capacity within the objectives of the European Chips Act.

Basic data

Implementation mode	single-handed
Project type / Program / Subprogram / Action / Subaction (WUT)	()
Edition / contest / topic identifier	HORIZON-INFRA-2023-SERV-01-01
Call URL	https://ec.europa.eu/info/funding-tenders/opportunities/portal/screen/opportunities/topic-details/horizon-infra-2023-serv-01-01

profile pages

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Units
Authors
Disciplines
Teams
Projects

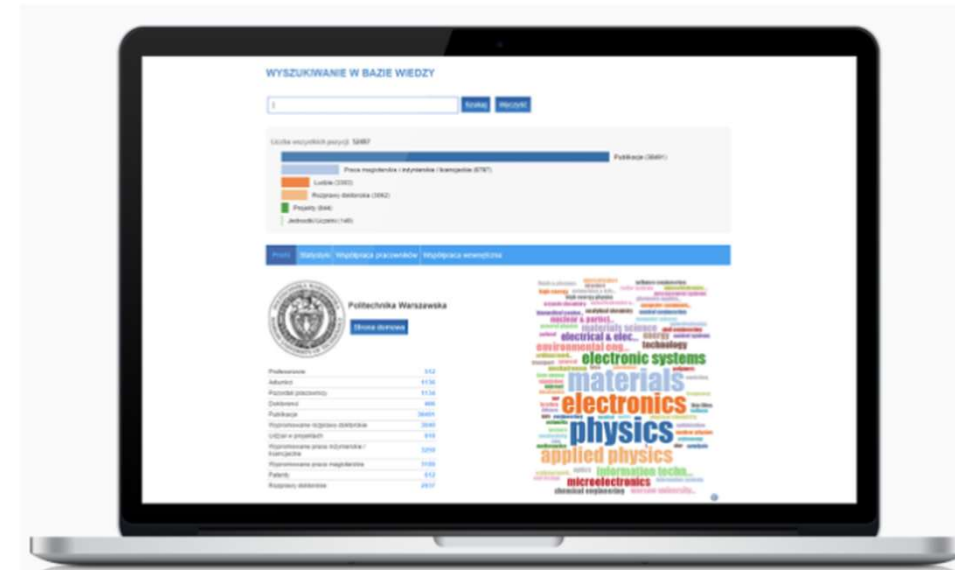
SUNGLIDER Smart Underground Metros



Media categories	press
Catalog / channel	Peter Kuczia
Language (if adequate)	eng (en) English
Related persons	leader: Ewelina Gawell (FA/DAUD) participant: Mariusz Wrona (FA/CSDCETI)
Affiliation unit	Warsaw University of Technology (WUT)
Main URL	https://youtu.be/doHK5cj0FP0
Year	2022
Description in English	The Sunglider Smart Underground Metro is about re-inventing public transport in the age of decarbonisation and climate resilience. Some experienced volunteer enthusiasts from universities in Osnabrück (D) and Warsaw (PL) want to make cars obsolete in their community by conquering the ±1 level with identical autonomous people movers, express roads movers and small autonomous buses to serve the

analytical tools

- lots of interesting, rich, interconnected data
- and tools to get the insight from the data and to answers business questions



reporting engine

Report creator

List of publications - individual participation (unified score)

Years from 2017

Years to 2021

Affiliation level
Warsaw University of Technology (WUT)

Include publications not used for evaluation

Include authors not belonging to N

Show advanced config

Download as HTML

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Report creator

List of publications - individual participation (unified score)

Zestawienie osiągnięć naukowych do oceny okresowej
Statement authorizing the employee to demonstrate achievements
Wykaz patentów - dorobek 3
List of publications - individual participation
wykaz publikacji - udział jednostkowy - share limit
wykaz publikacji - udział jednostkowy - dorobek
wykaz publikacji - udział jednostkowy - dorobek
List of publications - individual participation (unified score)
Bibliometric analysis
GDPR report
Editors pivot table
Pivot table
Pivot table (mel_DW - 01-11 11:29)
Pivot table (mmalinow - 11-24 05:20)
Report for professional promotion
wykaz publikacji - udział jednostkowy - dorobek
CV
Researcher CV

Report creator

Activity Report

Years from

Years to

Report generation date

Publications

Projects

View finances

Detailed report

Prizes

Patents

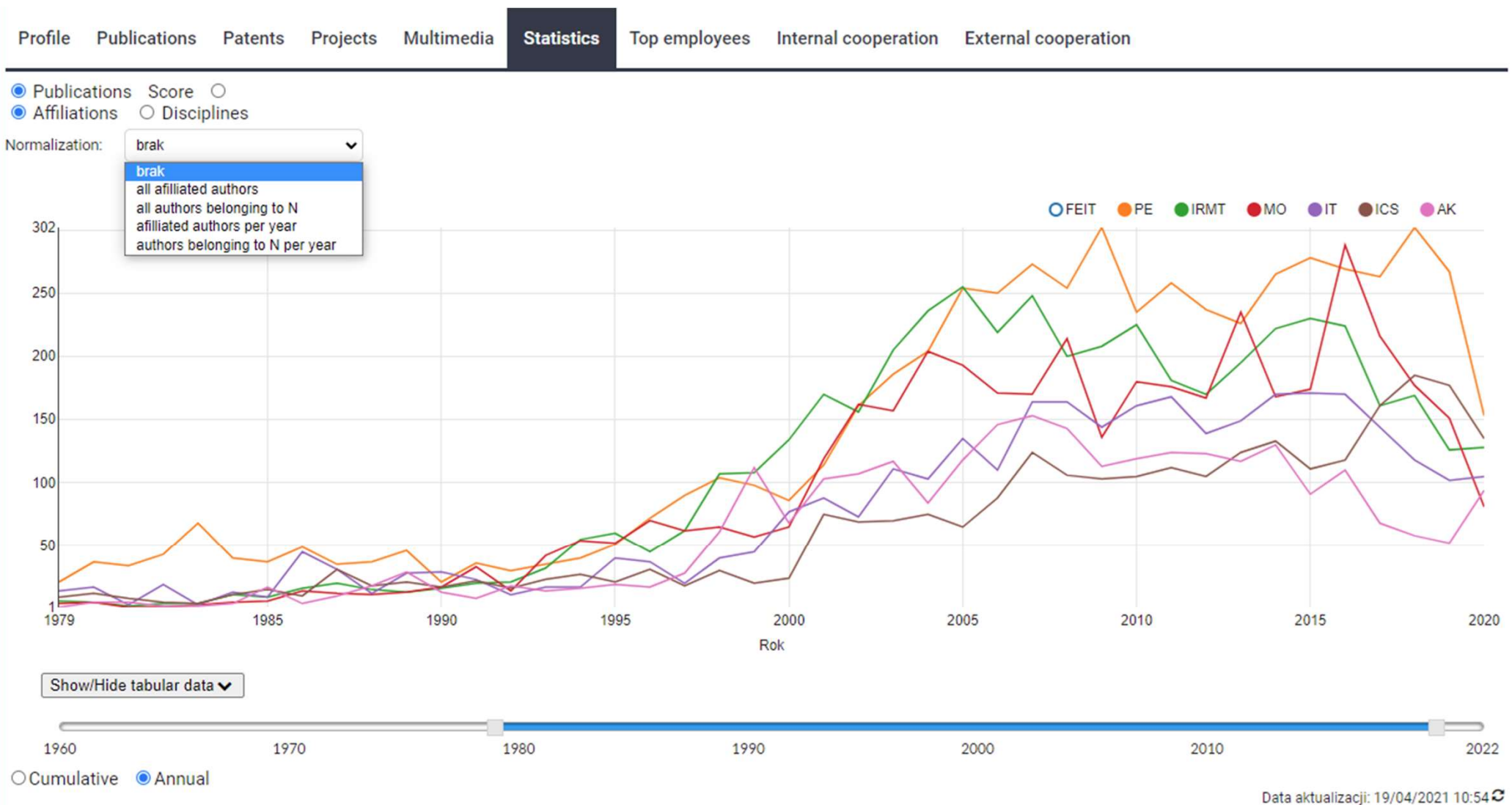
Conferences

Implementations

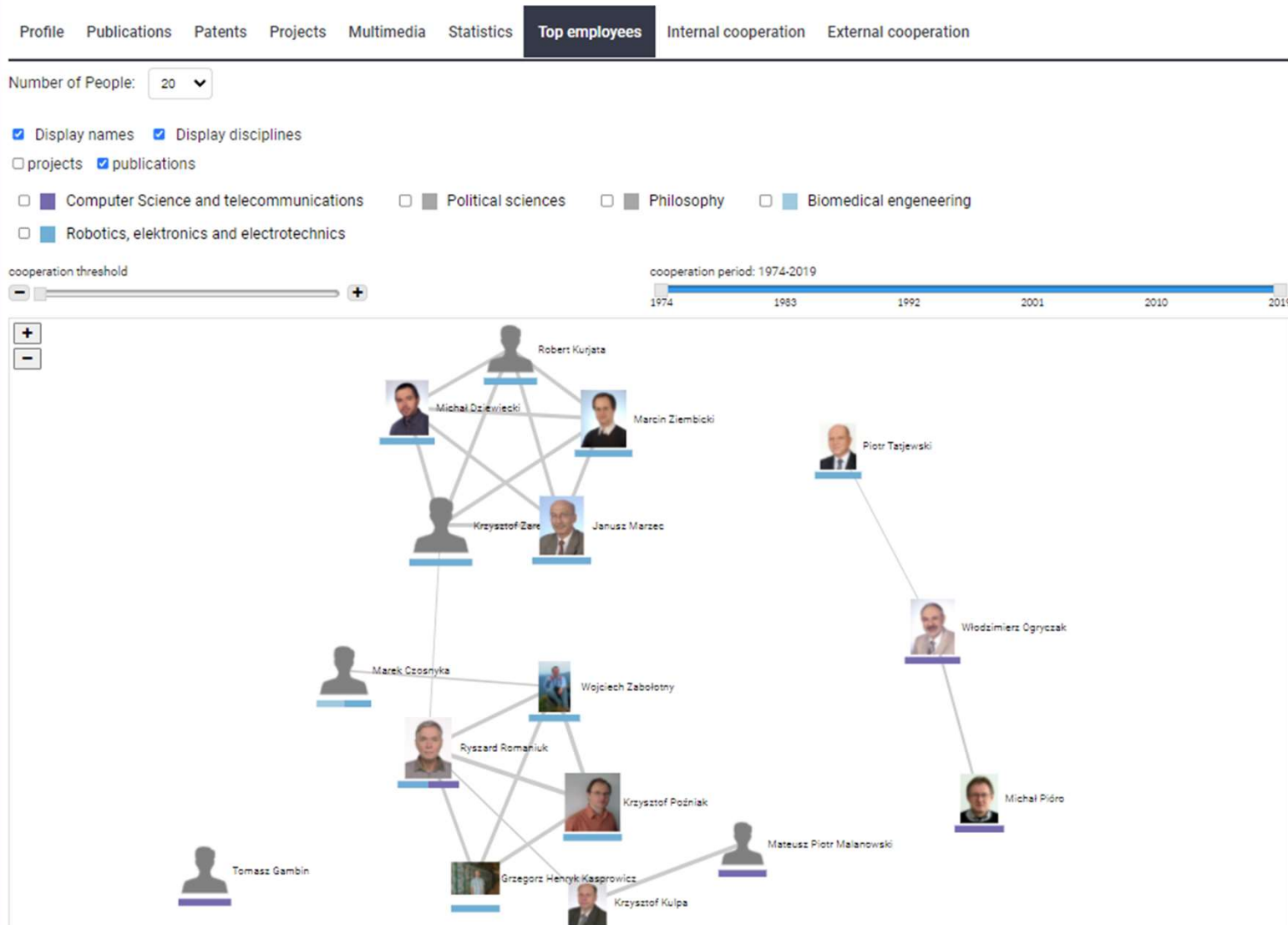
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visualizations



cooperation graphs



pivot tables

Available

Abstract in English Abstract in Polish Author affiliation   External affiliation  Autor  Author - Discipline of science in the declaration (Act 2.0)  Author - Discipline of science (Act 2.0) 
 Author - belonging to N Author - Area, field, discipline  Author status Author status in publication Author age  Award Collection Journal File Habilitation thesis ID IF Wos ISSN Issue year  Book
 Language Licence - type  License - sharing method License - the version of the licensed document License Not used for evaluation Prize Level Publication type Publisher (from the publisher list) 
 Publisher name (outside publisher list) Record status Editor Scopus CiteScore Scopus SNIP Score (nominal) bookseries System Total number of authors Total number of authors 

Row  Publication type 

Columns

	Score (nominal)											
Publication type	<u>0</u>	<u>5</u>	<u>20</u>	<u>40</u>	<u>50</u>	<u>70</u>	<u>80</u>	<u>100</u>	<u>120</u>	<u>140</u>	<u>200</u>	Totals
<u>book</u>	<u>4</u>	<u>6</u>	<u>18</u>				<u>16</u>		<u>1</u>			<u>45</u>
<u>chapter from monograph</u>	<u>7</u>	<u>8</u>	<u>61</u>	<u>29</u>								<u>105</u>
<u>conference material</u>	<u>92</u>	<u>19</u>	<u>230</u>	<u>16</u>		<u>47</u>				<u>24</u>	<u>2</u>	<u>430</u>
<u>journal paper</u>	<u>51</u>	<u>15</u>	<u>34</u>	<u>38</u>	<u>1</u>	<u>120</u>		<u>222</u>		<u>205</u>	<u>53</u>	<u>739</u>
<u>report</u>	<u>12</u>											<u>12</u>
Totals	<u>166</u>	<u>48</u>	<u>343</u>	<u>83</u>	<u>1</u>	<u>167</u>	<u>16</u>	<u>222</u>	<u>1</u>	<u>229</u>	<u>55</u>	<u>1331</u>

bibliometry

Bibliometry*

h-index (Scopus Citations)

h-index (WoS Citations)

Total IF

Total SNIP

Total CiteScore

Cumulative ministry score

11 no pub title							cited date	
8	1		Kryszkiewicz Marzena, Rybiński Henryk : Finding Reducts in Composed Information Systems, In: Proceedings of the International Workshop on Rough Sets and Knowledge Discovery: Rough Sets, Fuzzy Sets and Knowledge Discovery / Ziarko Wojciech (eds), 1993, Londyn, Springer-Verlag, pp.261-273, ISBN 3-540-19885-7	89	13/02/2023			
25.608	2		Rybiński Henryk : On First-Order-Logic Databases, ACM Transactions on Database Systems, 1987, vol. 12, pp.325-349, DOI:10.1145/27629.27630	47	20/10/2022			
34.897	3		Podsiadło Mariusz, Rybiński Henryk : Financial time series forecasting using rough sets with time-weighted rule voting, Expert Systems with Applications, 2016, vol. 66, pp.1339-1351, DOI:10.1016/j.eswa.2016.08.066	38	01/06/2023			
52.36	4		Kryszkiewicz Marzena, Rybiński Henryk : Reducing information systems with uncertain attributes, In: Lecture Notes in Computer Science (including subseries Lecture Notes in Artificial Intelligence and Lecture Notes in Bioinformatics), Lecture Notes in Computational Vision and Biomechanics, 1996, pp.285-294, ISBN 9783540612865	37	13/02/2023			
995	5		Kryszkiewicz Marzena, Rybiński Henryk : Data Mining in Incomplete Information Systems from Rough Set Perspective, In: Rough Set Methods and Applications, New Developments in Knowledge Discovery and Information Systems / Polkowski Lech, Tsumoto Shusaku, Lin Tsan Y. (eds), Studies in Fuzziness and Soft Computing, 2000, Springer-Verlag, pp.567-580, ISBN 3-7908-1328-1	33	19/07/2023			
	6		Bembenik Robert, Rybiński Henryk : FARICS: A method of mining spatial association rules and collocations using clustering and Delaunay diagrams, Journal of Intelligent Information Systems, 2009, vol. 33, pp.41-64, DOI:10.1007/s10844-008-0076-1	32	01/06/2023			
	7		Bembenik Robert, Skonieczny Łukasz, Rybiński Henryk [et al.] (eds.): Intelligent Tools for Building a Scientific Information Platform, Studies in Computational Intelligence, vol. 390, 2012, Springer, 277 p., ISBN 978-3-642-24808-5, DOI:10.1007/978-3-642-24809-2	31	19/07/2022			
	8		Kryszkiewicz Marzena, Rybiński Henryk, Gajek Marcin : Dataless Transitions between Concise Representations of Frequent Patterns, Journal of Intelligent Information Systems, 2004, vol. 22, pp.41-70, DOI:10.1023/A:1025828729955	30	13/02/2023			
	9		Rybiński Henryk, Kryszkiewicz Marzena, Protaziuk Grzegorz M. [et al.] : Discovering synonyms based on frequent termsets, In: Rough Sets and Intelligent Systems Paradigms / Kryszkiewicz Marzena [et al.] (eds.), Lecture Notes in Artificial Intelligence, 2007, vol. 4585, Germany, Springer Verlag, pp.516-525, ISBN 10-3-540-73450-3	22	19/07/2023			
	10		Kryszkiewicz Marzena, Rybiński Henryk : Computation of reducts of composed information systems, Fundamenta Informaticae, 1996, vol. 27, pp.183-195	22	19/07/2023			
	11		Muraszkiewicz Mieczysław, Rybiński Henryk : Towards a parallel rough sets computer, Rough Sets, Fuzzy Sets and Knowledge Discovery, 1994, pp.434-443	22	16/08/2023			
	12		Koperwas Jakub Janusz, Skonieczny Łukasz, Kozłowski Marek [et al.] : Intelligent information processing for building university knowledge base, Journal of Intelligent Information Systems, 2017, vol. 48, pp.141-163, DOI:10.1007/s10844-015-0393-0	21	01/06/2023			
	13		Rybiński Henryk, Skonieczny Łukasz, Koperwas Jakub Janusz [et al.] : Integrating IR with CRIS – a novel researcher-centric approach, Program-Electronic Library and Information Systems, 2017, vol. 51, no. 3, pp.298-321, DOI:10.1108/PROG-04-2017-0026	21	01/06/2023			

customization

- Feature toggles

Turn on/off and configure particular modules and functionalities



AAA     

🏠 Editor's panel Researchers ▼ Research Outputs ▼ Research potential ▼ Promotion ▼ More ▼ About ▼

Features						Search	✕
ID	Toggle	Group	Permissions	Properties	Description	Actions	
editorInterface.tooltip.labelExplanation		editorInterface			Display tooltips with label explanation		
editorInterface.menu		editorInterface		1	Indicate menu template file for editor interface menu		
editorInterface.editorialLayout.public		editorInterface			Use editorialLayout in public views		
topmenu.journals		topmenu			Enable journals option on top menu		
topmenu.team		topmenu			Enable team option on top menu		
topmenu.otherActivities		topmenu			Enable otherActivities option on top menu		
topmenu.userFeedback		topmenu			Enable userFeedback option on top menu		
topmenu.research.implementations		topmenu			Enable implementations option on top menu		

customization

- Look & Feel

Base of Knowledge
Warsaw University of Technology



Home Editor's panel Units and people Research Outputs Research potential More About



WROCLAW UNIVERSITY
OF ENVIRONMENTAL
AND LIFE SCIENCES

Search...

Everywhere



Disciplines

architecture and urban planning	automation, electronics, electrical engineering and space technologies	biotechnology
philosophy	information and communication technology	biomedical engineering
chemical engineering	civil engineering, geodesy and transport	materials engineering
mechanical engineering	environmental engineering, mining and energy	mathematics
chemical sciences	physical sciences	management and quality studies
law		

Disciplines

biotechnology	social and economic geography and spatial management	civil engineering, geodesy and transport
environmental engineering, mining and energy	biological sciences	agriculture and horticulture
nutrition and food technology	veterinary science	animal science and fisheries

Faculties

Faculty of Biology and Animal Science	Faculty of Environmental Engineering and Geodesy	Faculty of Veterinary Medicine
Faculty of Biotechnology and Food Science	Faculty of Life Sciences and Technology	Faculty of Spatial Management and Landscape Architecture

Priority research areas

 Veterinary	 Technology and food science	 Environmental science
--	---	---

integration with external systems

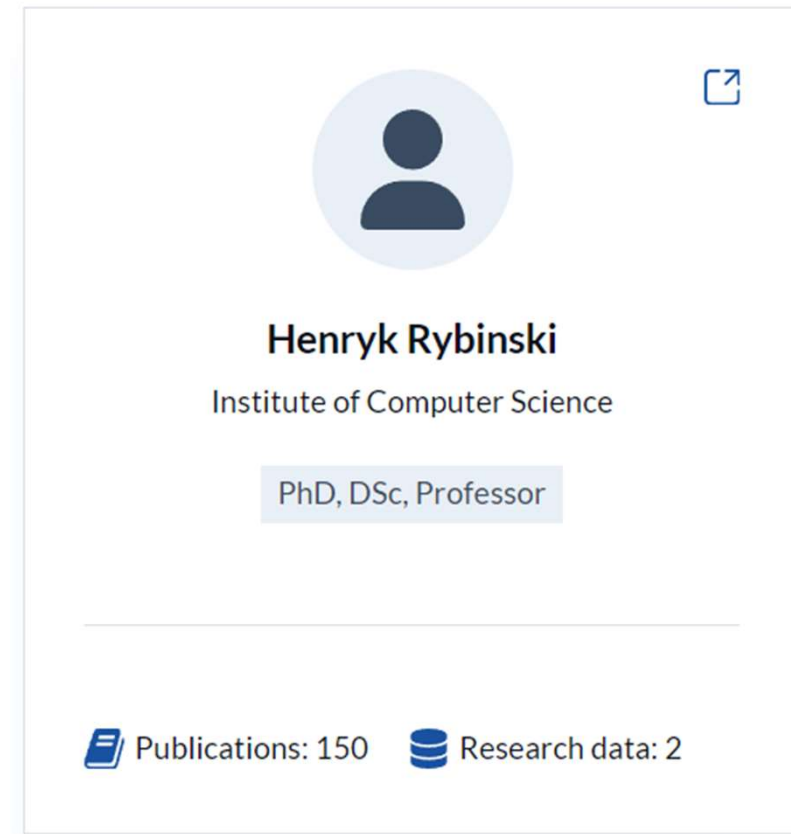
- Get additional data from external systems

- Scopus
- Web of Science
- Google Scholar
- Sherpa Romeo
- ROR
- CrossRef
- DataCite
- PBN
- POL-on
- Altmetrics
- PlumX



integration with external systems

- Export data to external systems
 - ORCID
 - POL-on
 - PBN
- Expose data to external systems
 - REST API
 - GraphQL API
 - Widgets
 - 5 ★ Open Data



Conclusion

- Open Science is not just a repository
- Staff are the core of the university, they do research, therefore the researchers profiles should be in the center of the system
- Complete research lifecycle (run by researchers) should be covered by the system
- A complete, interlinked data in the form of semantic network, covering all the research activities and outputs, should be stored around profiles
- ... bringing a view of on-going research to the society (also business value to various stakeholders)
- Integrating CRIS with IR and RPS makes the maintenance cheaper and gives extra added value to the system functionality

To see more

The WUT Knowledge Base - <https://repo.pw.edu.pl/index.seam?lang=en>

The system page - <https://www.omegapSir.io/>



OMEGA-PSIR

Thank you for your attention

