

### **Abstract**

One of the recent tasks and responsibilities of the Slovak Centre of Scientific and Technical Information (CVTI SR) is to provide technology transfer support to public research organisations on national level. For this purpose, SCSTI has been mandated by the Ministry of Education, Science, Research and Sport of the Slovak Republic to implement national project, co-financed from the EU structural funds within the Operational Programme Research and Development, named National infrastructure for technology transfer support in Slovakia – NITT SK. The project is focused on building and securing operation of the national system supporting technology transfer processes in Slovakia and is implemented in the period June 2010 – December 2014 with the total budget of € 8.2 million. The transfer of knowledge from science to industry, for the benefit of society, will be supported through the complex mechanism, which is currently being developed. The key subject in the whole system will be the National Technology Transfer Centre, which will co-operate closely with local technology transfer centres established at universities and public research institutions. Important part of the system will be the National patent fund, from which financial support in the processes of protecting and commercialising intellectual property will be provided to public research institutions. The financial support shall include payments for patent filing and maintenance (PCT, USPTO, European and national applications), patent attorneys services, patent translations, partner search, marketing, negotiating and licensing. Even nowadays, patent filing fees are covered from the state budget money administrated by the CVTI SR, while external support services are provided within the NITT SK project. This is a great benefit for Slovak public and state universities and the Slovak Academy of Sciences, which had to permanently face the lack of financial means for these purposes. Concerning the technology transfer activities that are being provided through the NITT SK project, these cover the whole process of transferring scientific knowledge into the praxis, starting from intellectual property protection and ending with its commercial utilisation. Services are provided by external high-level experts on relevant technology transfer issue from respective scientific field. All costs are covered from the NITT SK budget and are free for scientific community. Concrete services include assessment of intellectual property commercialisation potential, state of the art analyses, patent application preparation and filing, technology marketing, partner searches, negotiation support, preparation of licensing agreements, spin-offs creation, follow-up of royalties' payment and so on. Since 2012, when this support started, several patent applications have already been supported within the NITT SK project. Last year, the National portal for technology transfer has also been launched within the NITT SK project. It provides a comprehensive overview of technology transfer issues serving researchers, students, companies and local TT offices. Useful are sample contracts, internal regulations and other methodological materials related to technology transfer. It comprises also a list of competencies of Slovak R&D institutions and links to relevant Slovak, foreign and international organisations, groups and initiatives.

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**A Study on the Improvement of Legal System for Collecting and Registering National R&D Reports** Kiseok Choi, Korea Institute of Science & Technology Information, KISTI, Korea

### **Abstract**

An R&D report - the result of a national research and development project of each government ministry - has the characteristic of a public knowledge-based asset. So it is used with various systems for disclosing and expanding its outcome to the public. In fact, however, systematically collecting and utilizing its related information in KISTI, Korea Institute of Science & Technology Information(National R&D Reports Registration and Administration Agency), is insufficient. Formal regulation for submitting and registering national R&D reports to KISTI, which is wholly responsible for circulating national R&D information, has been arranged well so far. However, specific and concrete regulation system is not enough to make sure of their actual submission and registration. Therefore, this study examines and proposes a specific improvement plan for making good

progress of collecting and registering national R&D reports at country levels. Also, it examines improvement methods for standardizing national R&D report style and applying for it, in order to increase work efficiency in submitting and registering the information of national R&D reports.

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#### **Industrial Philology: problems and techniques of data and archives preservation for future generations**

Alessandra Cinini, Sebastiana Cucurullo, Stefano Sbrulli, Manuela Sassi, Eva Sassolini, Istituto di Linguistica Computazionale, "Antonio Zampolli" CNR, Italy

##### **Abstract**

Institute of Computational Linguistics in its fifty-year history has accumulated a wide variety of texts and corpora that have been stored in various formats and record layouts. Today, the memory of the procedures and codes of the past is still documented and the people who worked there are in service, we must thus plan a recovery strategy that maintains digital preservation and reuse. For example, one can cite texts in Latin and ancient Greek, which required a complicated system of encoding if we think that in the 60s-70s punch cards with a limited set of characters available were used. This part of the work has already been addressed and equivalence tables were created, so that a full performance can be obtained, even in a non-Latin alphabet, using Unicode encoding. The problems related to text handling are mainly character encodings, based on different operating systems used over the years, the formats of the documents and the indexing system. Differences in the handling of text at different times, and content problems are among the most common. It often happens that textual materials produced in or recovered from a project of the past do not have a standard format, but are the expression both of technology and of the research needs at that time. For this reason it was decided to study of a system for the realization of procedures for transcoding the characters (from EBCDIC, passing by ASCII, to arrive at Unicode) and for indexing and treatment of any type of texts. Consequently, for a correct operation of materials recovery, was made a standardization procedure of the format of the texts. This allows the disclosure and consultation with any system, open source or proprietary, while fully respecting the rights of the texts that are taken into consideration. It remains to be seen what course to take to preserve the ancient procedures in programming languages for which printouts of processing still exist: can they be preserved or should they be dropped? Can they be considered a form of "industrial archeology"? The answer to these questions may result from a comparison of opinions that the people of Grey is perhaps the most qualified to do.

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**Measuring interdisciplinarity within the bio-related scientific areas** Izabela Kijeńska-Dąbrowska, Information Processing Institute, OPI, Poland

##### **Abstract**

The aim of the paper is to investigate conducted studies and evaluate best practices in research of measuring interdisciplinarity within the scientific environment of the bionanoscience. The number of research projects, studies and analyses conducted within the new, frontier fields is evolving. The core idea of the proposal is to map and evaluate interdisciplinarity measures and indicators used within the literature review and suggest the most suitable and excellent ones from the perspective of scientific usefulness and understanding. The idea of the paper raised from the fact, that interdisciplinarity gives the positive synergy effect taken from the traditional scientific disciplines. Instant increase within interdisciplinarity in modern research is caused both, by growth in specialization in science itself, and by aggregation of knowledge sourcing from various scientific disciplines. Different sources of knowledge and independent by now scientific fields are combined together in order to solve problems of contemporary world and advancement in frontier science. Cross-disciplinarily of research is believed to be more creative and innovation prone. Boundaries between traditional fields are no longer stable. Use of knowledge created within one discipline is more often used in other scientific fields and

results in formation of discoveries or innovations applied in real life. Thus, in modern times, solutions to major technology and society problems are taken from multidisciplinary research. Due to evolving need of defining, measuring and enhancing interdisciplinarity of research, the number of studies on the subject, using different approaches and indicators, has been increasing since 1990s. The most often used and commonly agreed definition of interdisciplinarity was initially mentioned by OECD (1998). According to this description one can say about interdisciplinarity, multidisciplinary or transdisciplinarity, while refers to increasing level of various interactions between traditional scientific disciplines. While interdisciplinarity in science has been attracting growing interest. There has been conducted several studies aiming at creation of tentative typology of disciplines and research areas, that are perceived as most often applied in research and thus creating subcategories or clusters of scientific fields. These thematic areas are innovation and solution prone and as so described as effective or efficient. The analyses of thematic areas typology is mainly based on bibliometric studies, cluster analyses and in-depth econometric studies. Analysing results from these studies one can observe astonishing trend concerning the increasing interdisciplinarity within the new established thematic areas.

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**Central Repository of Theses and Dissertations – A Unique Umbrella Solution for a Significant Category of Grey Literature in the Slovak Republic** Juraj Noge and Július Kravjar, Slovak Centre of Scientific and Technical Information, CVTI SR, Slovakia

#### **Abstract**

An ordinary person or even a professional may not realise that higher education institutions (HEI) in such a small country like Slovakia produce around 80 000 theses and dissertations each year. The fact that these theses and dissertations have been collected systematically since April 2010 from all HEI in Slovakia operating under the Slovak legislation, as well as archived, administered and made public, was presented at last year's GL conference in Roma where we mentioned major benefits of establishing the Central Repository of Theses and Dissertations (CRTD), which now covers a complete GL category. It may be interesting to look at the solution from a slightly different perspective – as a unique technological solution that had to meet numerous requirements of its sponsor and to overcome unexpected technical and administrative obstacles. In addition to the graphic presentation and technical description of key components, the poster also summarises major organisational activities that had to be overcome during the implementation of the system. The succession of performed steps and activities, as well as an outline of the technical solution may inspire its potential followers. Drawing attention to complications that arose during the implementation and operation, including the description of possible solutions, may be included in the best practices in this area. The CRTD has always been intended as a basis for the comparative corpus for the Anti-plagiarism System (APS). APS is an extension of CRTD; both systems have been operating for three years and they are a major contribution to the implementation of the strategic objective of reducing the level of plagiarism at HEI in the Slovak Republic. The poster contains a list of major benefits of the CRTD in the Slovak Republic, supplemented with statistical data. We also outline its development with an emphasis on the extension of the system's functionalities and possibilities of its integration with other GL systems.

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**Life after Microfiches: The French National Centre for the Reproduction of PhD Theses, ANRT** Joachim Schöpfel, Charles de Gaulle University Lille 3 ANRT – GERiCO, France

#### **Abstract**

The ANRT has played a significant role in the back office of the French network for the dissemination and preservation of PhD theses for over forty years. Its online catalogue contains more than 200,000 PhD theses that academic or other research institutions can order in print format or on microfiche (MF). Complementary to

this national mandate, the ANRT runs a print-on-demand service for more than 7,200 PhD theses called “Thèses à la carte”. Today, the development of electronic theses and dissertations (ETD) and open access is challenging the future of the ANRT. Is there a life after microfiche for the ANRT? The poster describes the ANRT, its purpose and activity in the French national network for the dissemination and preservation of PhD theses. It then presents the results of a strategic analysis conducted as a part of an internal audit of its national mandate and its other current activities. Based on this analysis, some options or scenarios are suggested for the future development, including preservation, digitization, publishing, teaching and research.

- Preservation: scanning of older MF holdings for digital archives; interest of computer-output MF for inexpensively storing large numbers of theses in permanent format.
- Digitization: scanning of older theses on MF or in print format for university repositories; scanning of other scientific heritage collections for academic servers.
- Publishing: development of print-on-demand service (university press).
- Teaching: guided tours and internships for BA and Master students in library and information sciences.
- Research: integration of ANRT in international research projects on ETDs (datasets, access restriction, open access infrastructure, scientometrics...).

This poster presents the ANRT for the first time to a larger international audience. The interest is twofold – help library professionals and scholars to identify the role and service offer of the ANRT and facilitate the access to French PhD theses; and help the ANRT to define its future orientation through discussion with experts and professionals of grey literature.

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**Data Management & Curation Services: Exploring Stakeholders Opinions** Plato L. Smith, Florida State University, FSU, USA

#### **Abstract**

The purpose of the research study was to explore data management and curation services issues currently affecting all disciplines. A data management and curation services survey (HSC No. 2012.9198) was approved by FSU IRB on 11/2/2012, launched on 11/5/2012, and closed on 12/5/2012. The survey was started by 64 participants, completed by 53, and garnered an 83% completion rate. Data management planning, data curation, digital curation, and digital preservation are grouped under the heading data management and curation services while promoters (funders), stakeholders (institutions), and users (evaluators) are grouped under the heading of stakeholders within the scope of this research article. A purposive sampling of stakeholders were administered a 10 question Likert-scale and selection questions survey. Survey results support researcher's assumptions of concept terminology confusion, “a methodology in theory differs from a methodology in practice” (Watson & Wood-Harper, 1993), and importance of elements of data management greater & data seal of approval assessment guidelines. Results identified theoretical frameworks/perspectives and answered the following research questions:

1. What are some data and digital curation terminology issues?
  2. Which elements of data management plan are important?
  3. Which data seal of approval assessment guidelines are important?
  4. What are some theoretical frameworks for research in data management and curation services education?
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### **Abstract**

The National Project for Popularisation of Science and Technology in Slovakia (PopVaT) started in April 2013 and it will continue until October 2015. It is co-financed from the EU structural funds. PopVaT is the fifth national project implemented by The Slovak Centre of Scientific and Technical Information (CVTI SR). The idea of the project follows the goals of National Centre for Popularisation of Science and Technology in Society (NCP VaT) – one of the departments of CVTI SR. It was created with the aim to fulfill the tasks related to implementation of the strategy of science and technology popularisation in society approved by the Ministry of Education, Science, Research and Sport of the Slovak Republic. The main aim of the project is to increase the awareness of three target groups of population about science and technology importance. The objective in target group general public is to inform about Science and Technology as an important part of people's lives and as field of society in which it is necessary to invest for better economic results in the future. Second target group of PopVaT concerns young people. It will use innovative and entertaining forms of popularisation to create a positive influence on young people who will be motivated to study in one of the areas of Science and Technology. Target group scientific community will receive support in the field of individual communication and promotion of results of their research activities to the general public. All main objectives will be achieved by the use of the most suitable activities and forms of promotion, regarding to each target group. The major activities of PopVaT are:

- Scientific multimedia shows for young people
- Documentaries and audiovisual resources about Science and Technology
- Promotion of Science and technology on the internet
- Communication on social networks
- Science and Technology oriented conferences, seminars, workshops, film festival etc.
- Science promoting publications and periodicals
- Creation of Science Centre – kind of hands on museum for young people and wider public.

Building of Science Centre is one of the most important activities of the project and this idea is strongly supported by the Ministry of Education, Science, Research and Sport of the Slovak Republic and by several science and technical unions, NGOs and also by private companies. This activity is important mainly due to the fact that Slovak Republic is one of the last developed countries without a place like Science Centre.

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**Federal GL System Input Flow Analysis** Aleksandr V. Starovoitov, Aleksandr M. Bastrykin, Anton I. Borzykh and Leonid P. Pavlov, Centre of Information Technologies and Systems of Executive State Authorities, Russia

### **Abstract**

The procedures of collecting, processing and disseminating information on research and development (R&D) reports and theses in Russia are specified by the federal-level grey literature (GL) information system introduced into production use. The continuity of input document flow is secured by the federal law "On the obligatory copy of documents". The system's main information resource is the collection of two types of documents: 1) full-text R&D reports and theses (candidate and doctoral dissertations, according to Russian tradition); 2) information cards containing the bibliographic description and abstracts (metadata) of the full-text documents. The essential characteristic feature of the system is that it functions in the waiting conditions when the volume of processed information, the system's load, is entirely dependent on the external factor –

the volume of the input document flow. The quantity of arriving documents is important from different points of view: it determines the distribution of workload over time and the completeness of the federal collection; it reflects the scientific activity of academic community and an executive discipline of scientists. Therefore a quantitative input flow analysis is both of theoretical and practical interest. In this paper we will consider neither content of arriving documents nor their quality standard – this would require a separate study. But in many aspects quantitative data are significant without respect to document quality: the computer power and human efforts needed to process a document do not depend on the document's scientific level as well as the collection to be complete must include all the issued documents no matter what their scientific importance is and only in case of complete collection its quality monitoring would allow to reveal that the situation in this or that science subject or research institution is up to the standard or needs improvement. The most evident system's input flow peculiarity is that the flow is, so to say, regularly uneven. The cycles of flow peaks and low input are repeated every year in the same months during decades and are expected to remain so as long as the traditional starting and finishing dates for scientific works exist in Russia. Besides this cyclic recurrence the input flow may temporarily increase or decrease once in several years following some organizational events or budget changes in science. All these factors must be taken into account when planning the system's workload and forecasting an expected input flow. In the paper the system's input flow analysis is presented based on statistical records of many years. Numerical data in relative and absolute values are given.

**„Gold Value“ Offer to Science and Research in Slovakia – is presented by the NISPEZ project and related activities** Mária Žitňanská, Michal Sliacky, Marián Vaňo, and Eva Králiková, Slovak Centre of Scientific and Technical Information, CVTI SR, Slovakia

#### **Abstract**

The national project activities are aimed at direct support to research and development (R&D) in Slovakia at national level and in long-term horizon. To provide access to a wide offer of world electronic information resources (EIR) is the most important activity. Access to EIR creates a part of a model of completely centralized providing of access to EIR as well as other activities serving to their effective usage. Creating a system for centralized access, search, use and administration of EIR for R & D is the second important project activity. The third and the same important part of the offer to science and research in Slovakia is represented by building of SciDAP – a central bibliographic database and portal access to the Slovak EIR for research and development. The Slovak scientific and professional journals including open access journals and grey literature documents are concerned. The SciDAP represents a tool to process documents which would be kept for a long time in the institutional repository of SC STI digital documents. These three activities create a part of the NISPEZ (National Information System to Promote Research and Development in Slovakia – Access to Electronic Information Resources and the Slovak Centre of Scientific and Technical Information is the NISPEZ project solver.

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**A Social Networking Research Environment for Scientific Data Sharing: The D4Science Offering** Massimiliano Assante, Leonardo Candela, Donatella Castelli, Antonio Gioia, Francesco Mangiacrapa, and Pasquale Pagano, Istituto di Scienza e Tecnologie dell'Informazione, ISTI-CNR, Italy

#### **Abstract**

Digital Libraries are nowadays called to support enhanced forms of scientific communication (we name these comprehensive research products) based on publication of “comprehensive scientific theories” – including the data and algorithms they are based on – as to make it possible for “others to identify errors, to support, reject or refine theories and to reuse data for further understanding and knowledge” . In order to do that, they are requested to (i) manage in a seamless way a rich array of data ranging from traditional research outputs, mainly papers and experimental data, to living reports, executable research papers, and scientific workflows and (ii) promote collaboration among coworkers by realising innovative research paths and strategies. To make this more challenging, data to be managed often fall into the “big data” domain. In this poster we present an



innovative environment conceived to satisfy the above requirements via social networking research facilities offered by the D4Science Infrastructure. D4Science is an implementation of the Hybrid Data Infrastructure (HDI) concept, i.e. it is an IT infrastructure that caters for its users with a comprehensive set of data management facilities offered as-a-Service. The D4Science social networking facilities manifest in a number of applications made available through a thin client (namely a web browser) and relying on the HDI. These facilities are conceptually close to the common facilities promoted by social networks – e.g. posting news, commenting on posted news – yet adapted to deal with the settings previously described, namely to promote large scale collaboration and cooperation on comprehensive scientific products, data sets, theories and tools. Overall, these facilities cater their users with: (a) a continuously updated list of events / news produced by users and applications (Home Social), (b) a folder-based file system allowing to manage complex information objects in a seamless way (Workspace), (c) an email-like facility for exchanging messages with selected co-workers (Messages), (d) a list of happenings organised by date, e.g. publication of a comprehensive research product, comments on a research product (Notifications), (e) a settings area where the user can configure diverse aspects characterising the system behaviour including his/her data and notification preferences (Personalisation).

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**Applied Information Ethics in Grey Literature: Introducing a new paradigm for enhancing professional practice** Sylvia Simmons and Jonathan Gordon-Till, InfoEthics UK

**Abstract**

The field of applied information ethics is concerned with the impact of information-based decision-making on the underlying moral compass of an organization and in turn on the business impact of ethical decision-making. Preliminary analyses of the professional landscapes in grey literature and applied information ethics in the early twenty-first century suggest that both fields share significant areas of concern with respect to professional practice. For example, whilst new technologies offer both opportunities and risks in managing grey literature, so too ethical questions are raised in the application of such new technologies in the digital preservation of archives. We posit that these shared areas of concern are exacerbated by the relatively poor understanding of our professional roles in the information age, and also that education and practitioner discourse in these two fields is deemed subordinate to – and is somewhat eclipsed by – perceived greater priorities in emerging technologies and the influence of globalization and new ways of working. If our conclusion is correct, we further suggest that our adjacent professional domains are at risk of complete marginalization, and by extension that our wider professional landscape (publishing, librarianship, records, information and knowledge management) is at risk of irreparable diminution. We invite interested practitioners and researchers to collaborate with us to validate our hypotheses. We also present an innovative and practical approach to ameliorating the risks associated with overlooking our areas of shared concern through the development an Information Audit Toolkit.

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**BDSP (Base de données en santé publique) – a unique initiative to archive and disseminate French grey literature on public health** François Petitjean, Marie-Laure Charron, Séverine Ferron, and Christiane Stock; La Banque de données en santé publique and INIST-CNRS, France

BDSP (database in public health) is a network of institutions initiated 20 years ago by the French ministry of health. Its aim is to collect and provide access to documents on public health topics, with specific attention to grey literature published in French. 40 organizations participate in this open and collaborative network, including the stakeholders of the French health system and from other French-speaking countries. It is managed by a team of 4 members of the EHESP School of Public Health. The network produces a multiservice portal which includes a bibliographic database with more than 450 000 records and 60 000 full text documents

online. It also offers a multilingual glossary and a thesaurus in public health. The website receives about 3000 visits per day. BDSP is a unique product by its “construction”, its contents and its scope. Its flexible organization has allowed for many adaptations and extensions over the past 20 years, aiming to cover all fields on public health. The bibliographic database offers access to an important number of grey documents published by the principal French organizations involved in public health, research units or government agencies, at both a national and regional level. The documents include expert’s reports, summary reports, policies, theses and dissertations. Participation in the BDSP network allows its members to archive their grey publications and data, to increase their visibility, to share current awareness tasks and exchange bibliographic records or documents as well as best practices. Working in a network further helps to deal with obstacles in managing grey literature such as insufficient recognition of the documents compared to journal articles, difficulties to obtain authorizations for the dissemination (in particular for government agencies) and to keep up with the rapid evolution of knowledge. At present the networks explores ways to extend its cooperation with other French speaking countries and to share grey literature in French.

Poster Session

**Note:**

**The main entrance hall and adjoining rooms will accommodate up to 25 conference posters. For information on the availability of space and further guidelines on posters, please contact [conference@textrelease.com](mailto:conference@textrelease.com)**