

**Fatos Xhafa**

*Hab. Full Professor /Professor Titular d'Universitat*

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## **Opponent Review**

To the submitted application of Docent, Dipl.-Eng. Natalia Kryvinska, Dr.techn., pedagogical employee of Faculty of Management of Comenius University in Bratislava, who is to be appointed as a professor in the field of management 3.3.15, drawn up on the basis of the Deputy Decree of the Chairman of the CoR. RKRaR / 62/2018 in accordance with §76, par. 10 of Act no. 131/2002 Coll. on Higher Education Institutions and on Amendments to Certain Acts as amended, pursuant to Section 4, par. 7 Decree of the Ministry of Education of the SR no. 6/2005 Coll. on the procedure of obtaining scientific-pedagogical title Professor, and Principles of appointment procedure as a professor at the Comenius University in Bratislava to the cited Decree of the Ministry of Education of the SR dated 28.11.2013.

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Docent, Dipl.-Eng. Natalia Kryvinska, Dr.techn. graduated from the National University “Lviv Polytechnics” in Lviv 1994, Ukraine, Engineering degree in Telecommunications. In 2003, she was awarded a PhD degree in the Electrical&IT Engineering from the Vienna University of Technology, Austria. She habilitated from the Comenius University in Bratislava Slovakia in 2015, in Management Information Systems.

### **A. Substance and range of pedagogical activities**

Since 1998, the applicant has been involved into continuous pedagogical work in Slovakia and abroad. In 1998-2010, Dr. Kryvinska was lecturing and later giving research seminars at the Institute of Telecommunications, Radioelectronics and Electronic Engineering, National University “Lvivska Polytechnica”, Lviv, Ukraine. In 2006-2007 she was a teaching and research associate at the Department of Computer Sciences, University of Salzburg, Salzburg, Austria. In 2014-2017, Doc. Kryvinska served as a University Lecturer at the Institute for Management Information Systems, Vienna University of Economics and Business (WU Wien), Vienna, Austria.

Since 2008, Dr. Natalia Kryvinska is a University Lecturer and Senior Researcher at the University of Vienna, Austria (Department of e-Business, Faculty of Business, Economics and Statistics). She serves also as a Project Leader at the University of Applied Sciences “FH Technikum Wien”, Vienna, Austria.

Currently, Dr. Natalia Kryvinska is also an Associated Professor at the Comenius University in Bratislava, Slovakia (Department of Information Systems, Faculty of Management).

Besides, she serves as visiting professor at the Institute of Information Technology, Faculty of Technical Physics, Computer Science and Applied Mathematics, Lodz University of Technology (Politechnika Łódzka), Łódz, Poland.

Dr. Kryvinska activities influence the profiling of scientific and educational work at the Faculty of Management - Comenius University in Bratislava; Faculty of Business, Economics and Statistics - University of Vienna. She initiated and developed teaching courses on Service Science, as well as interdisciplinary framework for further promoting of the Service Science curricula at the Faculty of Management - Comenius University in Bratislava and Faculty of Business, Economics and Statistics - University of Vienna.

Further, Dr. Kryvinska is a member of an Academic Advisory Board, participating in Councils (Review-, Appointment- Committee, Board for Post/Doctoral Qualification), Funktionen in Gremien und Organisationen - Begutachtungskommission, Berufungskommission, PhD kommissionen in above mentioned universities.

She supervises and co-supervises Slovak and foreign PhD students, of whom 1 has successfully completed her studies, 2 ones are on the final stage, and 3 PhD candidates come this year from Austria and Germany.

**Based on the above explored evaluation of educational activities, I can approve that Dr. Kryvinska is an academia fellow with high pedagogical professional advisability and involvement. Thus, it can be stated that the criteria for obtaining the professor title in the pedagogical activities are entirely met.**

## **B. Research and publication activities**

Since 1998, Dr. Kryvinska is involved in various national and international research projects, starting from Institute of Telecommunications, Radioelectronics and Electronic Engineering, National University "Lvivska Polytechnica", Lviv, Ukraine.

In 2000-2003, ÖAD (Austrian Agency for International Cooperation in Education and Research) funded, Visiting Researcher at the Vienna University of Technology, Institute of Communication Networks, participating in projects with IKN industrial partners.

In 2005-2007, Austrian Research Association/Österreichische Forschungsgemeinschaft (ÖFG), MOEL-Plus-Förderungsprogramm.

In 2007-2009, IBM Academic Initiative, Research Project "Strategic enterprise planning and dynamic business process management by means of service-oriented principles/engineering. An analysis of potentials, challenges and the strategic impact of process-centric application development".

In 2008-2013, Austrian Research Promotion Agency / Österreichische Forschungsförderungsgesellschaft mbH (FFG), cluster of projects.

In, 2011-2015, ÖAD (Austrian Agency for International Cooperation in Education and Research) funded, and The National Scholarship Programme of the Slovak Republic (NSP) funded - Guest Professorship at the Department of Information Systems, Faculty of Management, Comenius University in Bratislava, Slovakia.

From 2017 - Erasmus+ Programme, Key Action 1, Staff Mobility, Inter-institutional agreement 2016/2017-2020/2021, visiting Professor at the Lodz University of Technology (Politechnika Łódzka).

Further, Project Leader within International Cooperation Project, Coordinated by University of Applied Sciences (Technikum Wien), Institute for Advanced Engineering Technologies, "Engineering goes International (ENGINE)", supported by WWTF funds, duration 3 years.

To conclude - Dr. Kryvinska research goals are directed towards understanding Service Management and Engineering Processes and their Business Value for Enterprises. Her in progress research plans are aimed at examining of Enterprises' Servitization, in particular customer-driven big-data analytics for the Enterprise Processes Servitization. On this specific topic, a broader cooperation academia-industry framework is being established, namely: University of Vienna, Comenius University, University of Applied Sciences "FH Technikum Wien", HP Slovakia, Aston Business School, Universitat Politècnica de Catalunya, Barcelona, Lodz University of Technology. And, she is one of the coordinators in this framework. Dr. Kryvinska scientific investigation areas include eServices/eBusiness, Service Science, Service Management and Engineering, Service Delivery Platforms, and Complex Service Systems Engineering. She is an experienced scientist in the field of eServices/Service Science. This can be verified by the long publication record in high-level peer-reviewed international conferences and journals as well as books.

Moreover, Dr. Kryvinska serves as an Academic Advisory Board member and participates in Councils (Review, Appointment- Committee, Board for Post/Doctoral Qualification) at the Comenius University, Faculty of Management; Vienna University of Technology, Faculty of Informatics; Lodz University of Technology, Faculty of Technical Physics, Computer Science and Applied Mathematics.

Dr. Kryvinska has an extensive list of high quality publications in the international peer-reviewed conferences and journals. In particular, it is worth to mention 5 scientific monographs published in the international publishing houses, 26 international journal contributions, 4 from them with IF more than 1, more than 70 contributions to renowned international conferences. Besides, she has given numerous educational seminars at various research institutions and academic associations.

**Based on such extensive output, it can be indicated that the candidate fully meets criteria for the publication activities. Moreover, the achievements considerably exceed average.**

### **C. Reflections on publication activities**

Scientific publications of Dr. Kryvinska are cited 1019 times - extracted from google scholar database, 307 in the international databases, 272 from them in the WOS and SCOPUS databases.

Dr. Kryvinska H-index, which is an author-level metric that measure both the productivity and citation impact of the publications of the scientist and based on the set of the scientist's most cited papers and the number of citations that they have received in other publications, is follows:

Google scholar H-index – 19 (1019 citations)

WoS H-index – 4 (55),

Scopus H-index – 9 (270)

**Considering mentioned above information from the international sources, it can be stated that Dr. Kryvinska meets criteria concerning citations of her scientific work, in addition minimum requirements are meaningfully overdone.**

### **D. Other aspects of professional activities**

Dr. Kryvinska is an active member of the international organizations: IEEE (Institute of Electrical and Electronics Engineers), AIS (Association of Information Systems), BAM (British Academy of Management), and Austrian Computer Society (ÖCG).

Further, Dr. Kryvinska is a recognized expert in the field, and serves the following professional activities for the international scientific community such as journals editing: SAGE, International Journal of Engineering Business Management (IJEEM), Springer, Global Journal of Flexible Systems Management (GJFSM), Associate Editor, Inderscience, International Journal of Services, Economics and Management (IJSEM), Associate Editor.

She chaired and co-chaired several international conferences, including scientific program, tracks and sessions leading, for which she received numerous Certificates of Appreciation.

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**On the basis of the results and as a summary of the findings on the fulfilment of the individual criteria, I conclude that the candidate for the title of professor Doc. Dr. Natalia Kryvinska, PhD., accomplishes the criteria of the Faculty of Management at the Comenius University for obtaining the full-time scientific and pedagogical title “Professor”.**



Fatos Xhafa

Barcelona, Spain, 21.08.2018