MRS Serbia Društvo za istraživanje materijala Srbije Materials research Society of Serbia

Belgrade, February 11th 2019

Dear colleagues,

We are honored and pleased to nominate Professor Danilo Suvorov for the **2019 MRS-Serbia Award for a Lasting and Outstanding Contribution to Materials Science and Engineering**. Prof. Suvorov is a member of the International Advisory Board of MRS-Serbia from its establishing, also, he take a participation in many of YUCOMAT Conferences. He is a Full member of the International Institute for the Science of Sintering and a member of the Managing Board. Prof. Suvorov is a scientist of international renown in the area of Materials Science and Engineering and including his name on the list of laureates would certainly contribute to the affirmation of MRS-Serbia award.

Danilo Suvorov was born on July 28, 1951, in Maribor, Slovenia. He has completed elementary (1966) and secondary school (1970) in Ljubljana where he continued his education. In 1976 he graduated from the Faculty for Natural Sciences and Technology, University of Ljubljana, in 1982 he achieved his MSc degree and in 1984 he defended his PhD thesis entitled "Reactions in oxide systems with perovskite structure and their influence on electrical properties". His research career began in 1976 at Iskra-IEZE Ljubljana (a big Slovene company for production of varied ceramic electronic components as well as many final electronic products) where he was employed till 1980. In 1980 he was invited to join Ceramic Department at the Jožef Stefan Institute, Ljubljana. In the period from 1980 to 1984 he was research assistant in the Department for Ceramic Materials, Jožef Stefan Institute, Ljubljana and then as post-doc researcher (1984-1987). He was a visiting researcher in the Institut für Gestainshüttenkunde, Aachen, Germany (1985-1986). In the period 1987-1992 he was a research associate in the Department for Ceramic materials, Jožef Stefan Institute, Ljubljana and assistant professor at Faculty for Chemistry and Chemical Technology, University of Ljubljana. In the same Department, D. Suvorov as research associate professor become the Head of the research group engaging in the study of ceramic and glassy materials (1993-2001). In the period 2001-2003 he become a Head of the group for the advanced materials and associated professor at the Faculty for chemistry and chemical technology, University of Ljubljana. The title research professor (scientific counselor) he obtained in 2004. In the beginning of 2001 he was elected for the Head of the Department for advanced materials, Jožef Stefan Institute, and in 2004 as a Full professor at Faculty for Chemistry and Chemical Technology, University of Ljubljana. Prof. Suvorov was leading the Advanced Materials Department until his retirement in 2018.

Prof. Suvorov's principles scientific interest in the field of ceramics materials include investigation of the high temperature reactions in the oxide ceramics, synthesis of electronic ceramics, studies of high temperature phase relations and reaction mechanisms in oxide systems and synthesis of glasses. In the field of ceramic materials his work was mainly focused on development of electronic ceramics with insulating properties such as capacitors,

microwave ceramics and tunable ceramics as well as those with semiconducting properties and LTCC technology (Low Temperature Co-fired Ceramics). He was also contributing significant findings in the field of nanomaterials research and bioactive ceramics. Since the very beginning of his scientific carrier at the Jožef Stefan Institute he was also active on investigations of glass materials and mineral wool. In this field his study was concerned with crystallization of glass in different oxide systems as well as developing of new bio soluble mineral fibers. His scientific excellence was also implemented in industry-financed projects with Slovene and foreign industrial partners. In the last 20 years he was a principal investigator in more than 40 R&D projects with institutions such as: University of Pennsylvania, USA, University of Manchester and UMIST, UK, Korean Institute for Science and Technology, South Korea, Universita Tor Vergata, Roma, Italy, V.I. Vernadskii Institute of General and Inorganic Chemistry NAS, Ukraine, South Bank University, London, UK, Institute of Physics, Prague, Czech Republic, Science des Procédés Céramiques et de Traitements de Surface, CNRS, France, CINSO (Centro de Investigaciones em Sólidos) CITEFA-CONICET, San Juan Bautista de La Salle 4397, Villa Martelli, Buenos Aires, São Paulo State University, Institute of Chemistry, Araraquara, Brazil, Institute of technical science of the SASA, Belgrade, Serbia, Institute of Physics, Prague, Czech Republic, etc. Those projects resulted in several newly developed materials and technologies. He was also a principal investigator of several EU-framework research projects (5th, 6th, 7th EU Framework), two Eureka projects, one NATO for peace project and a co-chair of COST 525 "Electronic ceramics".

Together with co-authors Prof. Suvorov has published more than 250 peer-reviewed articles and presented over 180 invited and plenary talks at various international conferences and in many recognized laboratories all over the world. According to the SCOPUS base, Professor Suvorov papers were cited more than 4060 times with *h*-index 36; according to Google scholar number of the citation is over 4800 and *h*-index is 40. He is also co-editor of five books-proceedings. Currently he holds 24 international patents.

D. Suvorov is a Professor of Materials Science at University of Ljubljana and has teaching various courses related to materials science at Faculty for Chemistry and Chemical Technology, at Faculty for Mathematics and Physics and at International Post-graduated school, Jožef Stefan. Under his supervision more than 55 Ph D's Masters degrees has been successfully completed. (among them 30 PhD and 25 MSc). He was also appointed as a Visiting Professor at the Zheijang University (2012) in Hangzhou and recently as an Honor Professor at Dianzi University (2018) in Hangzhou, China. Currently he holds a position of Program Manager in Urban Mining Company, Austin, Texas, USA.

His outstanding contribution to ceramic science and technology is not limited only to the functional materials. In selecting the areas of fundamental research, he is motivated by development needs for industrial production. He proved himself as able and resourceful researcher and a responsible leader of numerous industry-financed projects with Slovene and foreign industrial partners. In the last 20 years he was a principal investigator in more than 65 R&D project which resulted in several newly developed materials and technologies. Together with co-authors he has published more than 270 technical reports (mainly in Slovenian

language) and holds 24 international and 3 Slovenian patents and several technical innovations.

Prof. Suvorov was recognized and very active in different international as well as domestic scientific societies. He was a President Elect of the European Ceramic Society in the period 2009-2011, he is a member of ICF, International Ceramic Federation since 1994 and served as a President of Technical Committee in 2012-2013 and as President in 2014-2016. He is a full member of the IISS, International Institute for Science of Sintering, and a member of Board of Governors, Slovenian Materials Society since 1994. He was a Vice-chair of Management Committee in European COST 525 Project "Advanced Electroceramics Grain Boundary Engineering". He also served as a member of Permanent Executive Committee, European Ceramic Society since 2005.

Prof. Suvorov served as the member of international and local boards for a number of Conferences on electronic ceramics held in Europe, USA, Japan, China and South Korea. Among them the most important are (1) In 1999 he organized the 1st Slovene-Korean Workshop on Materials and technologies in Ljubljana, (2) In 2000 he organized first International Conference on Microwave Materials and Their Application MMA 1 Bled, (3) In 2005 he organized IX European Ceramic Society Conference and Exhibition in Portorož, (4) Since 2000 he is a co-organizer of the International Symposium on "Advanced Dielectric Materials: Design, Preparation, Processing, Properties & Applications" at Annual meetings of the American Ceramic Society. As a chair person he has acted in more than 180 international conferences.

Prof. Suvorov is a recipient of several scientific awards including National Science Innovation Award 1984 and 1987 (Slovenia). In 2016 he was awarded with Wakino Award for the outstanding achievements in microwave-ceramics research. Prof. Suvorov is a Fellow of the American Ceramic Society since 2008, a Fellow of the European Ceramic Society (2011) and in 2007 he become Invited Academician in World Academy of Ceramics. In 2018 he was elected for the Foreign member of the Academy of Engineering Science of Serbia – AESS.

For many years Prof. Suvorov has an exceptional cooperation with colleagues from various institutions in Serbia. Moreover, in Department for advanced materials (K9), Jožef Stefan Institute, a large number of young scientists, closely related with MRS-Serbia, prepared their doctoral thesis or underwent scientific trainees' through postdoctoral research fellowships. Through this cooperation, Professor Suvorov certainly contributed to the development of Serbian science.

Dragan Uskoković, Enrico Traversa, Slobodan Milonjić, Vuk Uskoković, Smilja Marković Mamoru Senna, Stane Pejovnik, Biljana Stojanović, Srečo Škapin,