Dragan Uskoković, Nenad Ignjatović, Vuk Uskoković and Smilja Marković

Materials Research Society of Serbia

Past, Present and Future 1995 - 2020





Materials Research Society of Serbia

Past, Present and Future 1995 - 2020



CIP- Каталогизација у публикацији Народна библиотека Србије
620.1:061.2(497.11)"1995/2020"
MATERIALS Research Society of Serbia : past, present and future : 1995-2020 / [authors Dragan Uskoković . [et al.]] Belgrade : Materials Research Society of Serbia, 2020 (Beograd : Gama digital centar) 62 str. : ilustr. ; 25 cm
Tiraž 200.
ISBN 978-86-919111-5-7
1. Uskoković, Dragan, 1944- [аутор] а) Друштво за истраживање материјала Србије (Београд) 1995-2020 COBISS.SR-ID 26949129

Title:	Materials Research Society of Serbia Past, Present and Future - 1995-2020
Publisher:	Materials Research Society of Serbia Knez Mihailova 35/IV, P.O. Box 433, 11000 Belgrade, Serbia Phone: +381 11 2185-437; <u>http://www.mrs-serbia.org.rs</u>
Authors:	Dragan Uskoković, Nenad Ignjatović, Vuk Uskoković, and Smilja Marković
Reviewers:	Slobodan Milonjić, Dejan Raković and Miodrag Zlatanović
Scientific Board:	Dragan Uskoković, Slobodan Milonjić, Velimir Radmilović, Dejan Raković, Milenko Plavšić, Miodrag Zlatanović, Nenad Ignjatović, Vuk Uskoković, Smilja Marković
Technical Board:	Aleksandra Stojičić, Milica Ševkušić, Aleksandar Dekanski, Predrag Živanović, Marijana Blešić, Sava Stoisavljević, Maja Jovanović, Jasmina Jevtić
Page layout & design	Aleksandar Dekanski
Cover page: Front cover: Back cover:	Nenad Ignjatović Opening Ceremony of the YUCOMAT 2009; Poster presentation, YUCOMAT 2007; Poster presentation, YUCOMAT 2019 Participants of the YUCOMAT 2019 conference YUCOMAT sphere
Copyright	[©] Materials Research Society of Serbia, 2020
Printed	Gama Digital Centar, Autoput 6, 11000 Novi Beograd, Serbia, Phone: 011/6306-992. E -mail: <u>stampa@gdc.rs</u>
Circulation:	200 copies

Contents

1
3
3
4
6
8
. 11
12
12
. 15
. 19
. 33
33 34
39
45
. 47
48 50
. 53
. 59
59
60
60



Preface

Materials science and engineering incorporate the acquisition of knowledge on synthesis and processing of materials, their composition and structure, properties and behavior, functions, and potentialities as well as the application of this knowledge in the making of various final products of high technology. Economic prosperity, life quality, and healthy environment are tightly connected with the improvements in the existing materials and the development of new materials and processing technologies. These improvements and the development can contribute greatly to the national priorities: energy saving, safe and clean environment and health protection, information and communication, infrastructure, transportation, *etc.*

In September 1995, in the Montenegrin coastal town of Herceg-Novi, a conference was held on materials science and engineering, including physics, physical chemistry, condensed matter chemistry, and technology in general. An initiative to establish the Yugoslav Materials Research Society (Yu-MRS) was born at this conference and, similarly to other materials research societies in the world, the program was made and the objectives determined. Yu-MRS, a nongovernment and nonprofit scientific association, was founded in 1997 to promote multidisciplinary goal-oriented research in materials science and engineering. The main task and the objective of the Society has been to encourage creativity in materials research and engineering so as to reach a harmonic coordination between achievements in this field in our country and analogous activities in the world, with the goal of including our country in the global international trends and projects. Until 2003, the conferences organized by Yu-MRS were held every other year, after which they became organized annually, always during one of the first two weeks of the month of September in the Montenegrin coastal town of Herceg-Novi. Following the political separation between Serbia and Montenegro, in 2007 Yu-MRS split into two new materials research societies: MRS-Serbia, the official successor of Yu-MRS, and MRS-Montenegro, which is still in the founding stage. In 2008, MRS-Serbia became a member of the Federation of European Materials Societies (FEMS).

Mission

Materials Research Society of Serbia is an organization of researchers working in the area of materials science and engineering in Serbia that promotes connections between national and international researchers working worldwide to achieve better results in their research and, thus, improve the quality of life.

Vision

Materials Research Society of Serbia will offer a platform where its members and their international associates can meet, discuss and arrange joint programs and actions.

https://www.mrs-serbia.org.rs

History

The idea of founding the Society

Learning timely from the developed world is a vital requirement for the continued progress of the developing countries. The story behind the founding of the Materials Research Society – Serbia (MRS – Serbia) nicely illustrates this. Namely, not too long after the American and the European Materials Research Societies were founded in mid-1970s and mid-1980s, respectively, we decided to follow along with these extraordinary efforts. YUCOMAT conferences organized by MRS – Serbia and having taken place first biennially and then annually on the first weeks of September in the scenic Adriatic town of Herceg-Novi serve as the best illustration of our success in this endeavor. For twenty-five years since the founding of MRS – Serbia and the first YUCOMAT conference held in 1995, each new conference has appeared better than the previous one, attesting to the validity of our early effort to create a Society that would not lag behind its developed world counterparts in absolutely anything, from the quality and contemporariness of science that it promotes to its involvement in regional educational efforts in materials science and beyond.

However, to properly understand the history of our MRS, a step back in time needs to be made. As the last decade of the 20th Century rolled around, Yugoslavia was a relatively developed country, with its GDP being higher than that of many European Union (EU) countries. The country practically stood at the doorstep of EU, ready to join it in no time. A fruitful scientific and technological collaboration was in place with entire Europe as well as with Americas and countries from the eastern hemisphere. Our scientists, at the same time, earned the epithet of reputable partners, embodying an ideal middle ground between the eastern excellence in theoretical studies and the western interest in practicality. As was the case a few decades earlier, during the Cold War era, our country was practically a paradise for cooperation, having enabled the scientists from both sides of the Iron Curtain to meet, present their findings, engage in unrestrained debates about their ideas and establish vital contacts as nods on today's network of a connected and globalized world.

Countless stories are shared to this very day about the first encounters between the renowned Soviet scientists and their western colleagues. As ever, science and art have acted as territories freed from political divisions and animosities that tore their real-life counterparts apart. Many of us still remember the gatherings of distinguished names from materials science and engineering – accidentally in the very same venue as that where YUCOMAT conferences are now being held - between 1969 and 1989 at conferences known as the Round Table Meetings on Sintering, later renamed to World Conference on Sintering. Unfortunately, this role as a bridge between the East and the West was erased in a heartbeat owing to a string of irrational strategic decisions of our political leaders in the early 1990s. It resulted in the breakup of a beautiful country that Yugoslavia was, a decade of civil wars, staggering social strife and horrible crimes before

whose victims every intellectual should have kept his head bowed. Following the economic sanctions installed by the United Nations in June 1992 the country was plunged into a deep isolation; the Serbian scientists were left to themselves only, with only a few sporadic contacts here and there with their foreign colleagues and former collaborators. Even publications in international journals were prohibited in the years that followed. At the same time, while our country was shattered by real bombs and ammunition, materials science worldwide experienced an explosion of new knowledge and its technological potentials. Biomaterials, energy materials, structural materials and nanomaterials are only some of the types of materials that underwent a small renaissance in this period of time. Yet, like a prisoner watching a carnival outside the rusty prison bars, we were pushed into ever deeper scientific, cultural and socioeconomic isolation while the outside world was getting ever more connected and prospective, the devastating consequences of which are reaped in every domain of our society to this very day.

What is important to notice is that this phenomenal moment in the evolution of materials science and engineering partially came forth as a result of the impetus given by the American scientists through their forming the first MRS in 1973. Ten years later, in 1983, the European MRS was founded, which was followed by the founding of other materials research societies all over the world – Japanese and Indian in 1989, Mexican in 1990, Korean in 1991, and eventually Serbian in 1997, a few years before the Brazilian in 2002 and the Ukrainian in 2003. The American MRS conferences with the unprecedentedly large numbers of symposia demonstrated the then unthinkable scale at which materials science congresses could be organized. Seeing this, a group of our scientists, who had worked in diverse fields of materials science and engineering - from physics to physical chemistry to chemistry to ceramics to metals to polymers to fine powders to thin films to monocrystals and beyond - felt inspired and came to an idea to organize the first conference on new materials, in September 1995, at which mainly reviews of their own and global research in the field would be presented and shared among the participants. The idea was unequivocally embraced and resulted in the formation of the embryo for a professional society that MRS – Serbia was to become two years later. The scenic seaside town of Herceg-Novi was chosen as the conference site because of its long tradition in hosting the aforementioned conferences on sintering and other domestic and international events of scientific and cultural significance.

Birth and the first days of Yu-MRS (MRS-Serbia)

History

The agreement reached during this inaugural conference on materials in September 1995 was respected and, as a result, months before the second such conference was to be held, in July 1997, our MRS was registered as the Yugoslav Materials Research Society (Yu-MRS) and our conferences became known as **YUCOMAT**, being the acronym for **YUgoslav CO**nference on **MAT**erials. The organization scheme was established so that 19 of the individual founders of the Society became the members of the Presidential Board. The President, the Vice President and the General Secretary who were elected then have remained acting in those roles to this very day. Although a few members of the Presidential Board voluntarily stepped down, they were replaced and its membership count remained the same: 19. It must be added that a significant moral support was received from the Serbian Academy of Sciences and Arts (SASA) and the Serbian Ministry of Science as well as from a few other institutions. The then President of SASA, late Aleksandar Despić, welcomed the participants at the first four YUCOMAT conferences (1995-2001) and was actively involved in the workings of the Society.

Logically, the most prominent sponsor was the Institute of Technical Sciences of the SASA, given that from the very first day a complete organizational logistics has been executed by its staff members. The Institute for Chemistry, Inorganic Technologies and New Materials in Padua, Italy must be acknowledged here for offering us a helping hand when it was the hardest; the Proceedings for conferences held in 1999 and 2001 were published with their financial aid.



Participants of the YUCOMAT 2001 conference

Initially we were driven by the idea that memories of even the most memorable presentations fade away with time and that, therefore, it would be useful to capture them in the form of Conference Proceedings. Starting with the first YUCOMAT, we have published the Conference proceedings in English and with relatively large publishers, which distributed them globally. The first eight proceedings were published in the Materials Science Forum edition of the Swiss publisher, Trans Tech Publications. Each of the first four proceedings was a single volume, containing about 40 papers per volume. whereas the following four proceedings were published as two combined volumes with about 20 papers per volume. By that time, the global trend of diminished interest in releasing scientific results in low-impact conference proceedings had already taken over the entire scientific community and we were not spared from it by any means. Therefore, the first YUCOMAT that went on without being accompanied by published proceedings was the one held in 2007. Instead, the small number of papers chosen, as ever, through rigorous peer review went on to be released in special issues of Materials and Manufacturing Processes published by Taylor and Francis, and of Surface *Engineering* published by Maney. Journals that published the selected works from subsequent YUCOMAT conferences were Materials and Manufacturing Processes, Acta Physica Polonica A and International Journal on Modern Physics B. Despite the diminishing interest in the submission of papers, we continue to encourage the Conference participants to share their work in a written format and contribute to the impression of a memory of this event in a lasting form.

YUCOMAT on the list of world-renowned conferences

To complement the effort to create a world-class scientific event for our community through YUCOMAT conferences, MRS – Serbia began to hold a complementary series of annual conferences for young researchers in the field of materials science and engineering. The success of the first such meeting held in Belgrade in 2002 prompted us to continue to organize them annually. Participants have included undergraduate and graduate students as well as PhD graduates younger than 35; they have been given a valuable opportunity to orally present their works to peers, professors and professional researchers who could guide them in their further research. This was meant to be a part of their training for presentations at larger international meetings, which would ideally become an integral part of their scientific careers. The interest in participating at these meetings has been continually increasing over the years: the first conference numbered 27 participants, whereas the most recent ones had about 80 participants each. The conference is now being held in Belgrade each December and in view of the interest of many younger international participants of YUCOMAT for it, as of 2010 the official language of the meeting was switched from Serbian to English.

At the initiative of our Korean colleagues, the members of the International Advisory Board, in 2018 we started organizing satellite symposia with Taiwanese materials scientists on "Advanced Materials for Biomedical Engineering" and with the National Core Research Center for Hybrid Materials Solution of Busan University on "Advanced Hybrid and Composite Materials". Fifteen of their professors and students participated in each of these mini symposia and presented their achievements in these fields.



Advanced Materials for Biomedical Applications (participants from Taiwan)

Hybrid Interface Materials (participants from Korea)

Satellite symposia were also organized with sole dedication to the eminent scientists from the field of materials science and engineering who had originated from the region of former Yugoslavia. Our goal here was to bring together these remarkable researchers at one place and offer them the opportunity to meet and present on their activities and thus deepen the scientific relations between them and with colleagues gathered around the MRS-Serbia. We intend to continue with the organization of such satellite symposia and extend the invitation to materials science and engineering communities in other rapidly developing countries.

Were we to look back at where we started from and compare it with where we find now, should we be satisfied with what has been achieved? Absolutely. We succeeded in uniting the majority of scientific potential in the field of materials science and engineering in this country around a common core and associating it with the work of peers from abroad. Working with extremely limited and modest resources we have succeeded in conforming the outlook of MRS - Serbia to the major European and worldwide trends. None speaks better in favor of this than the programs of all the previously held YUCOMAT conferences.



 Satellite Symposia at YUCOMAT 2017 - Renowned scientists from ex-Yugoslavia (from left to right) Radoslav Adžić, Chemistry Department, Brookhaven National Laboratory, Upton, NY, USA Nenad Marković, Materials Science Division, Argonne National Laboratory, USA Doug Perović, Department of Materials Science and Engineering, University of Toronto, Canada Zlatko Sitar, Materials Science and Engineering, North Carolina State University, USA Gyula Eres, Materials Science and Technology Division, Oak Ridge National Laboratory, Oak Ridge, USA) Endre Horváth, EPFL SB IPHYS LPMC, Lausanne, Switzerland
Tijana Rajh, Center for Nanoscale Materials, Argonne National Laboratory, Lemont, Illinois, USA Marija Drndić, Department of Physics and Astronomy, University of Pennsylvania, USA Vuk Uskoković, Center for Targeted Drug Delivery, Chapman University, Irvine, CA, USA Andraš Kiš, École Polytechnique Fédérale de Lausanne, Switzerland

Since the times of the first YUCOMAT conference in 1995, almost purely local in character, with no foreign participants, YUCOMAT has transformed into a truly international meeting, whereat two-thirds of all participants are now affiliated with foreign scientific institutions. From the first YUCOMAT conference, whose focus was on review presentations of our most renowned materials scientists, to the most recent ones, twenty-five years later, the selection of invited, plenary lecturers was made meticulously. Their total number at this point exceeds 400, which is one-tenth of the overall number of participants at all YUCOMAT conferences up to now – over 4100. They have come from around 60 different countries and all five continents of the world. After the biennially held conferences in the first 8 years, that is, until 2003, we transitioned to the annually held ones. This transition invoked a plenty of insecurities and disbelief at first, but they were swiftly overcome by our faith in the immense latent potentials in our scientific milieu. The interest in the participation did not diminish and we have maintained a steady number of 200-250 presentations per conference. In 2006, as a result of the breakup of the state union between Serbia and Montenegro, the Yugoslav MRS changed its name to MRS – Serbia, the sole successor of the Yu-MRS. Countless prolific contacts have been established at these conferences, even during the times of our deepest international isolation, and have resulted in many official and unofficial research collaborations wherefrom equally many joint research projects sprang to life. The broader recognition of our activities came in 2008 when MRS – Serbia became one of the 28 members of the Federation of European Materials Societies, which gathers around 28,000 researchers working in the field of materials science and engineering under its umbrella. Numerous renowned colleagues originally from Serbia and the neighboring countries have also been attracted and they have widely accepted this conference as a forum for the presentation of their freshest research findings and for learning about the research accomplishments in their countries of origin too. Such is, we believe, the best way for the arrival at intimate interfaces between their research programs and the locally performed research, wherefrom a fruitful cross-fertilization of knowledge could be initiated. We have given a substantial support for young researchers through the promotion of the best doctoral and masters theses and the best oral and poster presentations at YUCOMAT conferences, as well as through holding the Conference of Young Researchers in the winter period.

As of 2015 we have also given the annual award for the exceptional and lasting contribution to the field of materials science and engineering. Early on, this award was limited only to scientists from the region of former Yugoslavia, whereas as of 2020 any scientists who contributed significantly to the progress of MRS-Serbia have become eligible for it.



Participants of the YUCOMAT 2019 conference

The essential task for MRS – Serbia in the future should be continued maintenance of the ascending path of progress and furthering of the internationalization of its YUCOMAT conference. With an increasing number of new conferences on materials science taking place all over the globe, many of which are predatory in nature, the retention of the status and the "brand", that YUCOMAT has secured over the years will be challenging. Still, we must secure its permanent place on the calendar of world events in this field, without straying from its main purpose, which is to gather materials science researchers from Serbia, from the Balkans and from the rest of the world, and provide a fruitful forum for the exchange of ideas, know-how and the initiation of collaborations from which everyone would benefit. More than anything, the continued emission of positive energy in the promotion of this wondrous field of science locally and globally must remain our central aim.

Perspectives and future activities

The basic task that the MRS - Serbia should accomplish in the future is to maintain the upward trajectory of development and refine it continuously, with a regular feedback from all of its affiliates. One thing common to all the different MR societies

History

and their sister associations, unions, federations, and societies, be they of physicists, chemists, crystallographers, ceramists or metallurgists, is that the task of building a recognizable image at the global scale is exceedingly hard. MRS - Serbia can proudly assert that this mission has been accomplished through its annual YUCOMAT Conference over the past 25 years, during which it traversed a long way from a purely national to a completely international character.

Among a series of conferences that exist today in the field of materials, YUCOMAT has become one of the gatherings with a regular place in the calendar of global events in this field, having a major role of bringing together the researchers from Serbia, from the neighboring countries and from all around the world.

MRS - Serbia will make further progress:

- by strengthening its links with other Societies and individuals in the field of materials science and engineering through the election of members of the International Advisory Board and election of members of the Presidential Board of the Society;
- by carefully selecting the plenary lecturers from different Materials Science and Engineering (MS&E) disciplines;
- by organizing satellite symposia and presenting highly selective awards, including the Annual Award for a Lasting and Outstanding Contribution to MS&E, PhD, oral and poster Awards.

In this way, we will strengthen the position of the MRS - Serbia and further increase the standards of our YUCOMAT conferences. The MRS - Serbia must also, as before, disseminate the positive energy by promoting this field in the country and in the world. In this context, our priority is to help build the principle of excellence in this field. Notwithstanding the miniscule federal and private source allocations to MS&E research in Serbia, we will not subsidy in these efforts. We will do so by raising our positive attitude toward science to the level existing in the developed world that we aspire to and create an environment for the incorporation of scientific knowledge into industrial products and technologies to a much greater extent than is the case today.

Committee members of YUCOMAT conferences (1995 - 2020)

1995

The founders of the Society and the organizers of the first conference: **President:** Dragan Uskoković

Vice-Presidents: Slobodan Milonjić, Velimir Radmilović, Branislav Radonjić and Dejan Raković

Secretary General: Jovan Nedeljković

Members: Milorad Davidović, Đorđe Drobnjak, Slobodan Jovanović, Đuro Koruga, Slobodan Marinković, Nadežda Petranović, Milenko Plavšić, Zoran Popović, Momčilo Stevanović, Ana Terlecki-Baričević, Andreja Valčić, Mira Vukčević, Miodrag Zlatanović

1997

President: Dragan Uskoković

Vice-Presidents: Slobodan Milonjić, Dejan Raković, Velimir Radmilović, Branislav Radonjić

Members: Jovan Nedeljković, Milorad Davidović, Momčilo Stevanović, Nadežda Petranović, Đorđe Drobnjak, Slobodan Jovanović, Zoran Popović, Milenko Plavšić, Andreja Valčić, Slobodan Marinković, Ana Terlecki-Baričević, Đuro Koruga, Mira Vukčević, Miodrag Zlatanović

1999 and 2001

Same as 1997, except Vera Dondur in lieu of Đorđe Drobnjak

2003 and 2004

Same as 1999, except Snežana Bošković, Zoran Petrović and Jovan Šetrajčić in lieu of Slobodan Marinković, Andreja Valčić and Nadežda Petranović

2005 - 2007

Same as 2003, except Slavko Mentus in lieu of Ana Terlecki-Baričević

2008-2016

Same as 2005, except Nenad Ignjatović, Nedeljko Krstajić and Vladimir Srdić in lieu of Slobodan Jovanović, Branislav Radonjić and Mira Vukčević

2017

Same as 2016, except Smilja Marković in lieu of Jovan Nedeljković

2018 and 2019

Same as 2017, except Đorđe Janaćković in lieu of Nedeljko Krstajić

2021

(Conference postponed from 2020 due to COVID-19 pandemic) President: Dragan Uskoković Vice-Presidents: Slobodan Milonjić, Velimir Radmilović, Dejan Raković

Secretary General: Nenad Ignjatović

Members: Gordana Ćirić-Marjanović, Vera Dondur, Đorđe Janaćković, Đuro Koruga, Smilja Marković, Slavko Mentus, Bojana Obradović, Zoran Petrović, Milenko Plavšić, Zoran Popović, Vladimir Srdić, Jovan Šetrajčić, Petar Uskoković, Miodrag Zlatanović

Meritorious members of the MRS-Serbia

Snežana Bošković, Milorad Davidović, Slobodan Jovanović, Slobodan Marinković, Nadežda Petranović, Branislav Radonjić, Momčilo Stevanović, Andreja Valčić

YUCOMAT international advisory boards

2005 - 2007

Fritz Aldinger (Germany), Rostislav A. Andrievski (Russia), Aline Auroux (France), Djamila Bahloul-Hourlier (France), Xavier Batlle (Spain), Giovanni Battiston (Italy), Ivan Božović (USA), Philippe Colomban (France), Miha Drofenik (Slovenia), Michel Fedoroff (France), Lev A. Gribov (Russia), Stuart Hameroff (USA), Paul Harrison (UK), Felix T. Hong (USA), Thomas Jung (Switzerland), Vladimir Krstić (Canada), Hans Theo Langhammer (Germany), Toshiaki Makabe (Japan), Egon Matijević (USA), Olga Mićić (USA), Amelia Montone (Italy), Eiji Osawa (Japan), Zoran S. Petrović (USA), Robert Sinclair (USA), Valeriy V. Skorokhod (Ukraine), Danilo Suvorov (Slovenia)

2008 - 2010

Chair: Robert Sinclair (USA); members same as 2005, except Frances Ross (USA), Enrico Traversa (Italy) and Jose A. Varela (Brazil) in lieu of Giovanni Battiston

2011 - 2013

Same as 2008, except Serena Best (UK), Uli Dahmen (USA), Mauro Ferrari (USA), Horst Hahn (Germany), Wolfgang Jaeger (Germany), Josè M. Kenny (Italy), Alexander H. King (USA), Robert Ritchie (USA), Richard W. Siegel (USA), Mamoru Senna (Japan), and Gordana Vunjak Novaković (USA) in lieu of Lev A. Gribov, Stuart Hameroff and Hans Theo Langhammer.

2014 and 2016

Same as 2011, except László Forró (Switzerland), Yury Gogotsi (USA), Feng-Huei Lin (Taiwan), Eva Olsson (Sweden), Davor Pavuna (Switzerland), Doug Perovic (Canada), Peter Franz Rogl (Austria), Vuk Uskoković (USA), and Jackie Ying (Singapore) in lieu of Djamila Bahloul-Hourlier, Michel Fedoroff, Thomas Jung, and Vladimir Krstić.

2016 and 2017

Same as 2014, except Rafal Dunin-Borkowski (Germany) in lieu of Jose A. Varela.

2018

Same as 2016, except Markus Antonietti (Germany), David C. Bell (USA), Jeffrey S. Brinker (USA), Hamis Fraser (USA), Aharon Gedanken (Israel), Vladimir Torchilin (USA), Knut Urban (Germany), and Paul Weiss (USA) in lieu of Egon Matijević, Rostislav Andrievski, Aline Auroux, Paul Harrison, Felix Hong, Amelia Montone, and Valeriy Skorohod.

2019

Chair: Robert Sinclair (USA)

Members: Fritz Aldinger (Germany), Markus Antonietti (Germany), Xavier Batlle (Spain), David C. Bell (USA), Serena Best (UK), Jeffrey Brinker (USA), Ivan Božović (USA), Philippe Colomban (France), Uli Dahmen (USA), Miha Drofenik (Slovenia), Rafal Dunin-Borkowski (Germany), Mauro Ferrari (USA), Laszlo Forro (Switzerland), Hamis Fraser (USA), Aharon Gedanken (Israel), Yury Gogotsi (USA), Horst Hahn (Germany), Robert Hull (USA), Wolfgang Jaeger (Germany), Jose M. Kenny (Italy), Alexander King (USA), Feng-Huei Lin (Taiwan), Toshiaki Makabe (Japan), Eva Olsson (Sweden), Eiji Osawa (Japan), Davor Pavuna (Switzerland), Doug Perovic (Canada), Zoran Petrović (USA), Robert Ritchie (USA), Peter Franz Rogl (Austria), Frances Ross (USA), Richard Siegel (USA), Mamoru Senna (Japan), Danilo Suvorov (Slovenia), Enrico Traversa (Italy), Vladimir Torchilin (USA), Raul Weiss (USA), Jackie Ying (Singapore).

2020

Chair: Robert Sinclair (USA)

Members: Markus Antonietti (Germany), Xavier Batlle (Spain), Yoshio Bando (Japan), David C. Bell (USA), Serena Best (UK), Jeffrey S. Brinker (USA), Ivan Božović (USA), Philippe Colomban (France), Uli Dahmen (USA), Rafal Dunin-Borkowski (Germany), Andrea C. Ferrari (UK), Mauro Ferrari (USA), Laszlo Forro (Switzerland), Elvira Maria Correia Fortunato (Portugal), Hamis Fraser (USA), Aharon Gedanken (Israel), Yury Gogotsi (USA), Horst Hahn (Germany), Robert Hull (USA), Jose M. Kenny (Italy), Alexander H. King (USA), Feng-Huei Lin (Taiwan), Milan Mrksich (USA), Mohammad Khaja Nazeeruddin (Switzerland), Eva Olsson (Sweden), Eiji Osawa (Japan), Davor Pavuna (Switzerland), Doug Perovic (Canada), Robert Ritchie (USA), Peter Franz Rogl (Austria), Frances Ross (USA), Richard W. Siegel (USA), Mamoru Senna (Japan),

Danilo Suvorov (Slovenia), Enrico Traversa (Italy), Vladimir Torchilin (USA), Shizhang Qiao (Australia), Knut Urban (Germany), Vuk Uskoković (USA), Gordana Vunjak Novaković (USA), Paul Weiss (USA), Jackie Ying (Singapore), Yuntian T. Zhu (USA).

Statistics

The first YUCOMAT conference, held in 1995, was opened by the Academician Aleksandar Despić, followed by the oral presentations by S. Koički & M. Manasijević, Methods of Perturbed Correlations and Distributions in Materials Science; Z. Popović, Using Raman Spectroscopy in Materials Science, and others. The total number of oral presentations was 32. In the following years, the plenary lectures would be grouped into a special session. As a part of the first plenary session in 2001, E. Osawa (Nano Carbons Research Company, Japan) gave a presentation titled New Developments in Applied Research on Fullerenes and Carbon Nanotubes.



In the 1995 - 2019 period, the number of accepted presentations was 4173, including plenary, oral and poster presentations.

Countries and the number of accepted presentations (1995 - 2019): Serbia (2294), Russia (378), USA (191), Poland (126), Czech Republic (113), Slovenia (112), Germany (94), Ukraine (70), France (61), Slovakia (54), Austria (44), Japan (44), Romania (44), Korea (41), Bosnia and Herzegovina (40), Montenegro (35), Albania (33), Italy (33), Spain (33), Iran (31), UK (31), Switzerland (23), Taiwan (23), Croatia (20), Canada (17), Algeria (14), Turkey (14), Israel (13), Hungary (12), Libya (11), Belgium (10), Bulgaria (10), Greece (10), Sweden (10), Belarus (9), China (9), Latvia (8), Australia (7), North Macedonia (7), Netherlands (6), Portugal (6), India (5), Kazakhstan (5), Finland (4), Mexico (4), Brazil (3), Nigeria (3), Chile (2), Singapore (2), Estonia (1), Ireland (1), Lithuania (1), Saudi Arabia (1).



YEAR Number of accepted presentations at YUCOMAT conferences per year



Ratio of international to domestic accepted presentations

In the 1995 – 2004 period, the largest number of presentations was held by domestic researchers. From 2006 until today, however, the number of international presentations in relation to the domestic has rapidly increased. As a result, the ratio of international to domestic accepted presentations exceeded 1 by 2008, 2 by 2015, and 3 by 2018.

16

Poster presentations



YUCOMAT 1997

YUCOMAT 2007



YUCOMAT 2009

YUCOMAT 2019



17

List of plenary speakers

1995

S. Koički (Institute of Nuclear Science Vinča, Belgrade, Yugoslavia), Z. Popović (Institute of Physics, Belgrade, Yugoslavia), V. Radmilović (University of Belgrade, Faculty of Technology and Metallurgy, Belgrade, Yugoslavia), D. Tjapkin (University of Belgrade, Faculty of Electrical Engineering, Belgrade, Yugoslavia), J. Nedeljković (Institute of Nuclear Science Vinča, Belgrade, Yugoslavia), D. Koruga (Molecular Machines Research Centar, University of Belgrade, Belgrade, Yugoslavia), V. Jović (University of Belgrade, IChTM, Belgrade, Yugoslavia), O. Aleksić (University of Belgrae, Faculty of Electrical Engineering, Belgrade, Yugoslavia), R. Aleksić (University of Belgrade, Faculty of Technology and Metallurgy, Belgrade, Yugoslavia), M. Šušić (Serbian Academy of Sciences and Arts, Belgrade, Yugoslavia), V. Dondur (University of Belgrade, Faculty of Physical Chemistry, Belgrade, Yugoslavia), M. Davidović (Institute of Nuclear Science Vinča, Belgrade, Yugoslavia), P. Putanov (Serbian Academy of Sciences and Arts, Belgrade, Yugoslavia), A. Terlecki-Baričević (University of Belgrade, IChTM, Belgrade, Yugoslavia), M. Plavšić (University of Belgrade, Faculty of Technology and Metallurgy, Belgrade, Yugoslavia), P. Dvornić (University of Belgrade, IChTM, Belgrade, Yugoslavia), D. Raković (University of Belgrade, Faculty of Electrical Engineering, Belgrade, Yugoslavia), R. Stanković (University of Belgrade, Faculty of Technology and Metallurgy, Belgrade, Yugoslavia), S. Jovanović (University of Belgrade, Faculty of Technology and Metallurgy, Belgrade, Yugoslavia), T. Nenadović (Institute of Nuclear Science Vinča, Belgrade, Yugoslavia), S. Marinković (Institute of Nuclear Science Vinča, Belgrade, Yugoslavia), M. Zlatanović (University of Belgrade, Faculty of Electrical Engineering, Belgrade, Yugoslavia), D. Uskoković (Institute of Technical Sciences of the Serbian Academy of Sciences and Arts, Belgrade, Yugoslavia), S. Milonjić (Institute of Nuclear Science Vinča, Belgrade, Yugoslavia), P. Pavlović (Institute of Nuclear Science Vinča, Belgrade, Yugoslavia), S. Bošković (Institute of Nuclear Science Vinča, Belgrade, Yugoslavia), M. Stevanović (Institute of Nuclear Science Vinča, Belgrade, Yugoslavia), A. Despić (University of Belgrade, IChTM, Belgrade, Yugoslavia), M. Dražić (University of Belgrade, IChTM, Belgrade, Yugoslavia), A. Valčić (University of Belgrade, Faculty of Technology and Metallurgy, Belgrade, Yugoslavia).

1997

F. Karasz (University of Massachusetts of Amherst, Massachusetts, USA), C. Silvestre (Instituto di Ricerca e Tecnologia delle Materie Plastiche, CNR, Arco Felice,

Italy), **S. Cimmino** (Instituto di Ricerca e Tecnologia delle Materie Plastiche, CNR, Arco Felice, Italy).

1999

J. Nedeljković (Institute of Nuclear Science Vinča, Belgrade, Yugoslavia), G. Battiston (Instituto di Chimica e Technologie Inorganiche e del Materiali Avanzati del CNR, Padua, Italy), G. Stafford (NIST, Marylend, USA), M. Konstantinović (Max-Planck Institute fur Festkorperforschung, Stuttgart, Germany), V. Radmilović (Lawrence Berkeley National Laboratory, University of California, Berkeley, CA, USA).

2001

E. Osawa (NanoCarbon Research Company, Chiba, Japan), V. Radmilović (Lawrence Berkeley National Laboratory, University of California, Berkeley, CA, USA), M. J. Edirisinghe (Materials Department, Queen Mary University of London, London, UK), M. Drofenik (Faculty for Chemistry and Chemical Engineering, University of Maribor, Maribor, Slovenia), H. T. Langhammer (Martin Luther Universitat Halle Wittenberg, Germany), G. Battiston (Instituto di Chimica e Technologie Inorganiche e del Materiali Avanzati del CNR, Padua, Italy), M. Čeh (Jožef Stefan Institute, Ljubljana, Slovenia), T. Kosmač (Jožef Stefan Institute, Ljubljana, Slovenia), S. Najman (Institute for Biomedical Research, Medical Faculty, University of Niš, Serbia).

2003

P. Harrison (School of Electronic and Electrical Engineering, University of Leeds, UK), T. Makabe (Department of Electronics and Electrical Engineering, Faculty of Science and Technology, Hiyoshi Yokahama, Japan), M. Fedoroff (Centre d' Etudes de Chimie Metallurgique, CNRS, Vitry, France), Ph. Colomban (LADIR-UMR, CNRS Universite P. & M. Curie, Thiais, France), Le Van Khoi (Institute of Physics, Polish Academy of Science, Warsaw, Poland), N. Marković (Materials Sciences Division, Lawrence Berkley National Laboratory, University of California, Berkeley, CA, USA), A. N. Khodan (Institute of Physical Chemistry, Moscow, Russia), M. W. Barsoum (Department of Materials Sciences and Engineering, Drexel University, Philadelphia, PA, USA), D. M. Hourlier Bahloul (UMR CNRS, Limoges, Cedex, France), A. Montone (Materials and Technology Unit ENEA CR Casaccia, Roma, Italy).

2004

R. Sinclair (Department of Materials Science and Engineering, Stanford University, Stanford, CA, USA), **X. Batlle** (Physics Department, University of California San Diego, La Jolla, CA, USA), **V. Radmilović** (National Center for Electron Microscopy, Lawrence Berkeley National Laboratory, University of California, Berkeley, CA, USA), **F.T. Hong** (Department of Physiology, Wayne State University, Detroit, MI, USA), **J. M. Nedeljković** (National Renewable Energy Laboratory, Golden, CO, USA), **D. Suvorov** (Jožef Stefan Institute, Ljubljana, Slovenia), **M. Komac** (Ministry of Education, Science and Sport, Ljubljana, Slovenia), **R. M. Leblanc** (Department of Chemistry, University of Miami, Coral Gables, FL, USA), **E. Antić-Fidančev** (Laboratoire de Chimie Appliquée de l'État Solide, CNRS, ENSCP, Paris, France), **B. Bonnetot** (L. M. I., UMR 5615, UCB Lyon, Villeurbanne Cedex, France), **A. Jesih** (Jožef Stefan Institute, Ljubljana, Slovenia), **P.** **Jovančić** (Textile Engineering Department, Faculty of Technology and Metallurgy, University of Belgrade, Serbia).

2005

F. M. Ross (IBM T. J. Watson Research Center, Yorktown Heights, NY, USA), R. **Sinclair** (Department of Materials Science and Engineering, Stanford University, Stanford, CA, USA), I. Božović (Brookhaven National Laboratory, Upton, NY, USA), R. M. Leblanc (University of Miami, Department of Chemistry, Coral Gables, FL, USA), A. P. Philipse (Van 't Hoff Laboratory for Physical and Colloid Chemistry, Utrecht University, Debye Institute, Utrecht, Netherlands), V. R. Radmilović (National Center for Electron Microscopy, LBNL, University of California, Berkeley, CA, USA), H. A. Calderon (Depto Ciencia de Materiales, ESFM-IPN, Mexico), D. Maguire (Nanotechnology Research Institute & N. Ireland Bio-Engineering Centre, University of Ulster, Jordanstown, North Ireland), Z. Konstantinović (Departament Física Fonamental, U. Barcelona, Barcelona, Spain), W. A. Soffa (Department of Materials Science, University of Virginia, Charlottesville, VA, USA), J. Degmová (Department of Nuclear Physics and Technology, Faculty of Electrical Engineering and Information Technology, Slovak University of Technology, Bratislava, Slovakia), E. Burzo (Faculty of Physics. Babes-Bolyai University, Cluj-Napoca, Romania), C. J. Seliskar (Chemistry Department, University of Cincinnati, Cincinnati, OH, USA), H. Stoeri (Vienna University of Technology, Vienna, Austria), J. C. Badot (Laboratoire de Chimie Appliquée de l'Etat Solide, UMR CNRS 7574, ENSCP, Paris, France), F. Aldinger (Max-Planck Institut für Metallforschung und Institut für Nichtmetallische Anorganische Materialien der Universität Stuttgart, Stuttgart, Germany), S. Pejovnik (Faculty of Chemistry and Chemical Technology, University of Ljubljana, Ljubljana, Slovenia), R. A. Andrievski (Institute of Problems of Chemical Physics, Russian Academy of Sciences, Chernogolovka, Moscow Region, Russia), E. F. Sheka (Russian Peoples Friendship University, Moscow, Russia), S. Sariciftci (Linz Institute for Organic Solar Cells (LIOS), Physical Chemistry, Johannes Kepler University Linz, Linz, Austria), M. Ilavský (Faculty of Mathematics and Physics, Charles University, Prague, Czech Republic), Z. S. Petrović (Kansas Polymer Research Center, Pittsburg State University, Pittsburg, KS, USA), F. T. Hong (Department of Physiology, Wayne State University, Detroit, MI, USA), S. I. Macura (Department of Biochemistry and Molecular Biology, Mayo College of Medicine, Mayo Clinic and Mayo Foundation, Rochester, MN, USA), Ph. Goldner (LCAES-CNRS-UMR 7574, ENSCP, Paris Cedex, France), A. Auroux (Institut de Recherches sur la Catalyse, CNRS, Villeurbanne Cedex, France).

2006

O. Umezawa (Dept. of Mechanical Engineering and Materials Science, Yokohama National University, Hodogaya, Yokohama, Japan), **I. Božović** (Brookhaven National Laboratory, Upton, NY, USA), **T. Makabe** (Keio University, Yokohama, Japan), **J. M. Calleja** (Departamento de Física de Materiales, Universidad Autónoma de Madrid, Madrid), **D. Suvorov** (Jožef Stefan« Institute, Ljubljana, Slovenia), **E. F. Sheka** (Peoples' Friendship University of the Russian Federation, Moscow, Russia), **O. Iglesias** (Departament Física Fonamental, Universitat de Barcelona, Barcelona, Spain), **B. Viana** (LCAES-ENSCP, Paris Cedex, France), **N. V. Kamanina** (Vavilov State Optical Institute, St. Petersburg, Russia), **A. Boukenter** (Laboratoire Traitement du Signal et Instrumentation, Saint-Etienne, France), **E. Ösawa** (NanoCarbon Research

Institute, Kashiwa-no-Ha, Kashiwa, Chiba, Japan), **R. A. Andrievski** (Institute of Problems of Chemical Physics, Russian Academy of Sciences Chernogolovka, Moscow Region, Russia), **A. Auroux** (Institut de Recherches sur la Catalyse, CNRS, Villeurbanne, France), **A. Montone** (Materials and Technology Unit, ENEA C.R. Casaccia, Roma, Italy), **F. T. Hong** (Dept. of Physiology Wayne State University, Detroit, Michigan, USA), **M. Dugić** (Department of Physics, Faculty of Science, Kragujevac, Serbia), **Z. S. Petrović** (Kansas Polymer Research Center, Pittsburg State University, Pittsburg, KS, USA).

2007

E. Olsson (Department of Applied Physics, Chalmers University of Technology, Göteborg, Sweden), R. Hull (Department of MSE, University of Virginia, Charlottesville, Virginia, USA), F. M. Ross (IBM T.J. Watson Research Center, Yorktown Heights, New York, USA), R. Sinclair (Department of Materials Science and Engineering, Stanford University, Stanford, California, USA), D. Chatain (CRMCN-CNRS, Marseille, France), V. Radmilović (National Center for Electron Microscopy, Lawrence Berkeley National Laboratory, University of California, Berkeley, California, USA), E. Spiecker (Microanalysis of Materials, Faculty of Engineering, Kiel University, Kiel, Germany), E. A. Stach (School of Materials Engineering & Birck Nanotechnology Center, Purdue Univ., West-Lafayette, IN, USA), H. P. Karnthaler (Materials Physics, University of Vienna, Vienna, Austria), Ch. A. Evans (Evans Analytical Group (EAG), Sunnyvale, CA, USA). K. H. Sandhage (School of Materials Science & Engineering, Georgia Institute of Technology, Atlanta, GA, USA), N. Kallay (Laboratory of Physical Chemistry, Department of Chemistry, Faculty of Science, University of Zagreb, Zagreb, Croatia), D. Suvorov (Advanced Materials Department, Jozef Stefan« Institute, Ljubljana, Slovenia), E. Traversa (Department of Chemical Science and Technology, University of Rome Tor Vergata, Rome, Italy), J. A. Varela (Universidade Estadual Paulista – UNESP, Araraguara, SP, Brazil), S. Bennici (Dip. Chimica Fisica ed Elettrochimica, Università degli Studi di Milano, Milano, Italy), J. C. Badot (Laboratoire de Chimie de la Matière Condensée de Paris, Paris, France), G. Lefèvre (Laboratory of Electrochemistry and Analytical Chemistry, ENSCP-CNRS, Paris, France), M. Remškar (Jozef Stefan Institute, Ljubljana, Slovenia), J. Wittig (Vanderbilt University, Nashville, Tennessee USA), A. Ye. Yermakov (Institute of Metal Physics, Ural Branch of RAS, Ekaterinburg, Russia), X. Batlle (Departament de Física Fonamental and Institut de Nanociència i Nanotecnologia, Universitat de Barcelona, Barcelona, Catalonia, Spain), J. Czernuszka (Department of Materials Sciences, Oxford University, Oxford, United Kingdom), I. **Ćosić** (School of Electrical and Computer Engineering, RMIT University, Melbourne, Australia).

2008

U. Dahmen (National Center for Electron Microscopy, Lawrence Berkeley National Laboratory, University of California, Berkeley, CA, USA), V. Radmilović (National Center for Electron Microscopy, Lawrence Berkeley National Laboratory, University of California, Berkeley, CA, USA), R. Hull (Department of Materials Science and Engineering, Rensselaer Polytechnic Institute, Troy, USA), I. W. Rangelow (FG Mikround Nanoelektronische Systeme, Technische Universität Ilmenau, Fakultät für Elektrotechnik und Informationstechnik, Institut für Mikro- und Nanoelektronik, Ilmenau, Germany), W. Jäger (Microanalysis of Materials, Institute of Materials

Science, Christian-Albrechts-University, Kiel, Germany), D. D. Perovic (Department of Materials Science and Engineering, University of Toronto, Toronto, Canada), W. Bras (Dutch-Belgian beam lines, Netherlands Organization for Scientific Research (NWO), DUBBLE CRG@ESRF (European Synchrotron Radiation) Facility, Grenoble, France), D. Suvorov (Advanced Materials Department, Jozef Stefan« Institute, Ljubljana, Slovenia), M. Senna (Faculty of Science and Technology, Keio University, Yokohama, Japan), J. M. Kenny (European Centre for Nanostructured Polymers, University of Perugia, UdR INSTM, Terni, Italy), J. Kusinski (University of Mining and Metallurgy, Laboratory Surface Engineering, Krakow, Poland), G. Solórzano (Department of Materials Science and Metallurgy, PUC-Rio de Janeiro, Brazil), G. W. Auner (Biomedical Engineering, Wayne State University, Detroit, MI, USA), R. Portier (Groupe de Métallurgie Structurale, Paris, France), R. Sinclair (Department of Materials Science and Engineering, Stanford University, Stanford, California, USA), X. Batlle (Departament de Física Fonamental and Institut de Nanociència i Nanotecnologia (IN2UB), Universitat de Barcelona, Barcelona, Catalonia, Spain), Serena Best (University of Cambridge, UK), R. A. Andrievski (Institute of Problems of Chemical Physics, Russian Academy of Sciences, Chernogolovka, Moscow Region, Russia), D. Petranovic (Design to Silicon Division, Mentor Graphics Corp., San Jose, CA, USA), F. Hofer (Institute for Electron Microscopy and Fine Structure Research, Graz University of Technology, Graz, Austria).

2009

G. Vunjak-Novaković (Columbia University, New York, NY, USA), A. Porter (Department of Materials, Imperial College, London, UK), R. Hull (Department of Materials Science and Engineering, Rensselaer Polytechnic Institute, Troy, USA), D. Pavuna (Institute of Physics of Condensed Matter, Ecole Polytechnique Fédérale de Lausanne (EPFL), Lausanne, Switzerland), D. Suvorov (Advanced Materials Department, Jožef Stefan Institute, Ljubljana, Slovenia), J. Mijović (Othmer-Jacobs Department of Chemical and Biological Engineering, Polytechnic Institute of New York University, Brooklyn, NY, USA), J. M. Kenny (Institute of Science and Technology of Polymers, CSIC, Madrid, Spain), B. Viana (LCMCP-ENSCP- UMR7574, ENSCP, Paris, France), M. V. Kuznetsov (Institute of Structural Macrokinetics and Materials Science Russian Academy of Sciences (ISMAN), p/o Chernogolovka, Moscow region, Russia), H. A. Calderon (Depto. de Ciencia de Materiales, ESFM-IPN, Ed. 9 UPALM Zacatenco D.F., Mexico), G. D. Hibbard (Department of Materials Science and Engineering, University of Toronto, Toronto, ON, Canada), E. A. Marquis (Department of Materials, University of Oxford, Oxford, United Kingdom), R. Sinclair (Department of Materials Science and Engineering, Stanford University, Stanford, California, USA), V. Radmilović (National Center for Electron Microscopy, Lawrence Berkeley National Laboratory, Berkeley, California, USA), P. Denes (Engineering Division, Lawrence Berkeley National Laboratory, Berkeley, CA, USA), N. Nakano (Keio University, Dept. of Electronics and Electrical Engineering, Yokohama, Japan), V. Sukharev (Mentor Graphics Corp., San Jose, CA, USA), M. Kovylina (Departament de Física Fonamental and Institut de Nanociència i Nanotecnologia (IN2UB), Universitat de Barcelona, Barcelona, Catalonia, Spain), R. A. Andrievskiy (Institute of Problems of Chemical Physics, Russian Academy of Sciences, Chernogolovka, Russia), A. Ravaglioli (Ceramics Science and Technology, Faenza, Italy).

2010

R. W. Siegel (Materials Science and Engineering Department, Rensselaer Nanotechnology Center, Rensselaer Polytechnic Institute, Troy, NY, USA), A. H. King (Ames Laboratory, Ames, IA, USA), R. O. Ritchie (Department of Materials Science & Engineering, University of California Berkeley, and Materials Sciences Division, Lawrence Berkeley National Laboratory, CA, USA), R. Sinclair (Department of Materials Science and Engineering, Stanford University, Stanford, CA, USA), V. Radmilović (National Center for Electron Microscopy, Lawrence Berkeley National Laboratory, Berkeley, CA, USA), H. Hahn (Karlsruhe Institute of Technology (KIT), Institute for Nanotechnology, Karlsruhe, Germany), W. Jäger (Microanalysis of Materials, Institute of Materials Science, Christian-AlbrechtsUniversity of Kiel, Kiel, Germany), M. Luysberg (Institute of Solid State Research and Ernst Ruska-Centre, Research Centre Jülich, Germany), A. M. Minor (Department of Materials Science and Engineering, University of California, Berkeley and National Center for Electron Microscopy, Lawrence Berkeley National Laboratory, Berkeley, CA, USA), T. F. Kelly (CAMECA Madison, Madison, WI, USA), R. Webb (Surrey Ion Beam Centre, University of Surrey, Guildford, Surrey, United Kingdom), L. Tsetseris (Department of Physics, National Technical University of Athens, Greece), V. A. Lubarda (Montenegrin Academy of Sciences and Arts, Podgorica, Montenegro, & Department of Mechanical and Aerospace Engineering, UCSD, La Jolla, CA, USA), M. Senna (Faculty of Science and Technology, Keio University, Yokohama, Japan), V. Uskoković (Division of Biomaterials and Bioengineering, University of California, San Francisco, CA, USA), A. L. Koh (Department of Materials, Imperial College London, London, UK), C. Körner (Universität Erlangen-Nürnberg, Lehrstuhl Werkstoffkunde und Technologie der Metalle WTM, Erlangen, Germany), U. Cvelbar (Plasma lab F4, Jozef Stefan Institute, Ljubljana, Slovenia), S. Ohara (Joining and Welding Research Institute, Osaka University, Ibaraki, Osaka, Japan), D. Suvorov (Advanced Materials Department, Jozef Stefan Institute, Ljubljana, Slovenia), A. Labarta (Departament de Física Fonamental and Institut de Nanociència i Nanotecnologia (IN2UB), Universitat de Barcelona, Barcelona, Spain), M. Pósfai (Department of Earth and Environmental Sciences, University of Pannonia, Veszprém, Hungary), S. Kobe (Jožef Stefan Institute, Ljubljana, Slovenia), R. Ubic (University, Boise, Idaho, USA), J.-Ho. Jeon (Korea Institute of Materials Science, Changwon, Korea).

2011

J. Y. Ying (Institute of Bioengineering and Nanotechnology, The Nanos, Singapore), U. Dahmen (National Center for Electron Microscopy, Lawrence Berkeley National Laboratory, University of California, One Cyclotron Rd., Berkeley, CA, USA), A. Zettl (Department of Physics, University of California at Berkeley and Materials Sciences Division, Lawrence Berkeley National Laboratory, Berkeley, CA, USA), B. Bhushan (Nanoprobe Laboratory for Bio- & Nanotechnology and Biomimetics, The Ohio State University, Columbus, Ohio, USA), R. Sinclair (Department of Materials Science and Engineering, Stanford University, Stanford, United States), V. R. Radmilović (Nanotechnology and Functional Materials Center, Faculty of Technology and Metallurgy, University of Belgrade, Belgrade, Serbia), M. Senna (Faculty of Science and Technology, Keio University, Yokohama, Japan), L. Forró (Laboratory of Physics of Complex Matter, Ecole Polytechnique Fédérale de Lausanne, Lausanne, Switzerland), D. Pavuna (Swiss Federal Institute of Technology (EPFL), Physics of Complex Matter, Lausanne, Switzerland), E. A. Stach (Center for Functional Nanomaterials, Brookhaven National Laboratory, Upton, NY, USA), D. Suvorov (Advanced Materials Department, Jozef Stefan Institute, Ljubljana, Slovenia), E. Saiz (Centre for Advanced Structural Ceramics, Department of Materials, Imperial College of London, UK). E. Spiecker (Center for Nanoanalysis and Electron Microscopy (CENEM), Materials Science and Engineering Department VII, University of Erlangen-Nürnberg, Erlangen, Germany), R. Kraehnert (Technical University of Berlin, Department of Chemistry, Berlin, Germany), **R. Hull** (Department of Materials Science and Engineering, Rensselaer Polytechnic Institute, Troy, NY, USA), W. Jäger (Institute of Materials Science, Christian-Albrechts-University of Kiel, Kiel, Germany), S. P. Ringer (Australian Centre for Microscopy & Microanalysis, The University of Sydney, NSW, Australia), J. Wittig (Vanderbilt University, Nashville, Tennessee, USA), A. Fraile Rodríguez (Dept de Física Fonamental and Institut de Nanociència i Nanotecnologia (IN2UB), Universitat de Barcelona, Barcelona, Spain), K.-H. Shin (KIST, Korea Institute of Science and Technology, Seoul, Korea), V. A. Fedotov (Optoelectronics Research Centre and Centre for Photonic Metamaterials, University of Southampton, UK), R. A. Andrievski (Institute of Problems of Chemical Physics, Chernogolovka, Russia), E.-T. Kim (Department of Materials Science & Engineering, Chungnam National University, Daejeon, Republic of Korea), A. A. Kornyshev (Department of Chemistry, Faculty of Natural Sciences, Imperial College London, London, United Kingdom), J. Dutkiewicz (Institute of Metallurgy and Materials Science of the Polish Academy of Sciences, Krakow, Poland), J. Michalska (Department of Materials Science, Silesian University of Technology, Katowice, Poland), I. Bykov (NT-MDT Co., Zelenograd, Moscow, Russia).

2012

S. J. Pennycook (Materials Science and Technology Division, Oak Ridge National Laboratory, Oak Ridge, TN, USA), L. Forró (Laboratory of Physics of Complex Matter, Ecole Polytechnique Fédérale de Lausanne, Lausanne, Switzerland), R. W. Siegel (Rensselaer Nanotechnology Center and Materials Science and Engineering Department, Rensselaer Polytechnic Institute, Troy, New York, USA), R. Sinclair (Department of Materials Science and Engineering, Stanford University, Stanford, United States), D. N. Seidman (Department of Materials Science and Engineering, Northwestern University, Evanston, IL, USA), V. R. Radmilović (Nanotechnology and Functional Materials Center, Faculty of Technology and Metallurgy, University of Belgrade, Belgrade, Serbia), H. Rose (University of Ulm, Ulm, Germany), U. A. Kaiser (University of Ulm, Ulm, Germany), F. Hofer (Institute for Electron Microscopy and Fine Structure Research, Graz, Austria), W. Jäger (Microanalysis of Materials, Institute of Materials Science, Christian-AlbrechtsUniversitaet zu Kiel, Kiel, Germany), E. Olsson (Department of Applied Physics, Chalmers University of Technology, Gothenburg, Sweden), J. Mayer (Central Facility for Electron Microscopy, RWTH Aachen University, Aachen, Germany, and Ernst Ruska-Centre for Microscopy and Spectroscopy with Electrons, Research Centre Juelich, Juelich, Germany), L. L. Shaw (Department of Mechanical, Materials and Aerospace Engineering, Illinois Institute of Technology, Chicago, IL, USA), R. A. Andrievski (Institute of Problems of Chemical Physics, Chernogolovka, Russia), J. Wittig (Vanderbilt University, Nashville, Tennessee, USA), V. Bobnar (Jožef Stefan Institute and Jožef Stefan International Postgraduate School, Ljubljana, Slovenia), J. De Yoreo (Molecular Foundry, Lawrence Berkeley National Laboratory, Berkeley, CA, USA), F.-H. Lin (Institute of Biomed Eng., National Taiwan

University, Taipei, Taiwan), **M. Filipič** (National Institute of Biology, Department for Genetic Toxicology and Cancer Biology, Ljubljana, Slovenia).

2013

I. Božović (Brookhaven National Laboratory, Upton, NY, USA), E. Zschech (Fraunhofer Institute for Nondestructive Testing, Dresden, Germany), Th. J. Richardson (Lawrence Berkeley National Laboratory, Berkeley, California, USA), R. E. Dunin-Borkowski (Ernst Ruska-Centre for Microscopy and Spectroscopy with Electrons and Peter Grünberg Institute, Forschungszentrum Jülich, Jülich, Germany), R. Sinclair (Department of Materials Science and Engineering, Stanford University, Stanford, United States), V. R. Radmilović (University of Belgrade, Faculty of Technology and Metallurgy, Nanotechnology and Functional Materials Center, Belgrade, Serbia), M. Haider (CEOS GmbH, Heidelberg, Germany), C. Ophus (National Center for Electron Microscopy, Lawrence Berkeley National Laboratory, Berkeley, CA, USA), S. Takeda (Institute of Scientific and Industrial Research, Osaka University, Ibaraki, Osaka, Japan), E. Snoeck (CEMES-CNRS, Toulouse, France), E. Olsson (Department of Applied Physics, Chalmers University of Technology, Gothenburg, Sweden), W. Jäger (Institute of Materials Science, Christian-Albrechts-Universitaet zu Kiel, Kiel, German), L. Forró (Laboratory of Physics of Complex Matter, Ecole Polytechnique Fédérale de Lausanne, Lausanne, Swiss), E. Traversa (Division of Physical Sciences and Engineering, King Abdullah University of Science and Technology (KAUST), Thuwal, Saudi Arabia), L. Calzolai (European Commission, Joint Research Centre Institute for Health and Consumer Protection, Ispra, Italy), F.-H. Lin (Institute of Biomedical Engineering, National Taiwan University, Taipei, Taiwan), **B. Viana** (Ecole Nationale Supérieure de Chimie de Paris (Chimie-ParisTech) Laboratoire de Chimie de la Matière Condensée de Paris; CNRS, Paris, France), R. A. Andrievski (Institute of Problems of Chemical Physics, Russian Academy of Sciences, Chernogolovka, Moscow Region, Russia), D. D. Perovic (Department of Materials Science and Engineering, University of Toronto, Toronto, Canada), E. Spiecker (Center for Nanoanalysis and Electron Microscopy (CENEM), Materials Science and Engineering Department, University of Erlangen-Nürnberg, Erlangen, Germany), D. Pavuna (Physics of Complex Matter, Swiss Federal Institute of Technology, Lausanne EPFL, Switzerland), A. L. Koh (Stanford Nanocharacterization Laboratory, Stanford University, CA, USA), G. Solórzano (Department of Materials Science and Engineering, PUC-Rio, Brazil), S.-J. L. Kang (Korea Advanced Institute of Science and Technology (KAIST), Daejeon, Korea), J. M. Zuo (Department of Materials Science and Engineering and Frederick Seitz Materials Research Laboratory, University of Illinois at Urbana-Champaign, Urbana, Illinois, USA), M. Senna (Faculty of Science and Technology, Keio University, Japan), P. F. Rogl (Institute of Physical Chemistry, University of Vienna, Wien, Austria), D. Suvorov (Advanced Materials Department, Jožef Stefan Institute, Ljubljana, Slovenia), R. Dominko (National Institute of Chemistry, Laboratory for Materials, Ljubljana, Slovenia), J. C. Badot (Laboratoire de Chimie de la Matière Condensée de Paris, Chimie ParisTech, CNRS, France).

2014

Gordana Vunjak-Novaković (Laboratory for Stem Cells and Tissue Engineering, Columbia University, New York, NY, USA), **Richard Siegel** (Rensselaer Nanotechnology Center and Materials Science and Engineering Department, Rensselaer Polytechnic Institute, Troy, New York, USA), **Robert Sinclair** (Department of Materials Science and

Engineering, Stanford University, Stanford, United States), László Forró (Laboratory of Physics of Complex Matter, Ecole Polytechnique Fédérale de Lausanne, Switzerland), Fritz Prinz (Department of Mechanical Engineering, Stanford University, Stanford, CA, USA: Department of Materials Science and Engineering. Stanford University, Stanford. CA, USA), Velimir Radmilović (University of Belgrade, Faculty of Technology and Metallurgy, Nanotechnology and Functional Materials Lab, Belgrade, Serbia), Miguel Salmeron (Lawrence Berkeley National Laboratory, University of California Berkeley, USA), Rafal Dunin-Borkowski (Ernst Ruska-Centre for Microscopy and Spectroscopy with Electrons and Peter Grünberg Institute, Forschungszentrum Jülich, Jülich, Germany), Paul Midgley (Department of Materials Science and Metallurgy, University of Cambridge, Cambridge, United Kingdom), Robert Hull (Department of Materials Science and Engineering, Rensselaer Polytechnic Institute, Troy, NY, USA), Peter Schattschneider (Institute of Solid State Physics and Service Centre for Electron Microscopy, Vienna University of Technology, Vienna, Austria), Wolfgang Jäger (Institute for Materials Science, Christian-Albrechts-University of Kiel, Kiel, Germany), Laurence Marks (Department of Materials Science and Engineering, Northwestern University, Evanston, IL, USA), Paulo Ferreira (Materials Science and Engineering Program, The University of Texas at Austin, Austin, TX, USA), Werner Mader (Institute for Inorganic Chemistry, University of Bonn, Bonn, Germany), Ehrenfried Zschech (Fraunhofer Institute for Ceramic Technologies and Systems, Dresden, Germany), Feng-Huei Lin (Institute of Biomedical Engineering, National Taiwan University, Taipei, Taiwan), Mamoru Senna (Faculty of Science and Technology, Keio University, Yokohama, Japan), Andržej Čalka (University of Wollongong, Faculty of Engineering and Information Sciences, Wollongong, NSW, Australia), Rostislav Andrievski (Institute of Problems of Chemical Physics, Russian Academy of Sciences, Chernogolovka, Moscow Region, Russia), Max Avdeev (Bragg Institute, Australian Nuclear Science and Technology Organisation, Lucas Heights, Australia), Andrei Kanaev (Laboratoire des Sciences des Procédés et des Matériaux, CNRS, Université Paris, Sorbonne Paris Cité, Villetaneuse, France), Eva Olsson (Department of Applied Physics, Chalmers University of Technology, Gothenburg, Sweden), José Kenny (Instituto de Ciencia y Tecnología de Polímeros, ICTP-CSIC, Juan de la Cierva, Madrid, Spain), Ai Leen Koh (Stanford Nanocharacterization Laboratory, Stanford University, Stanford, California, USA). Tom Diekwisch (Department of Oral Biology, University of Illinois, Chicago, IL, USA), Vuk Uskoković (Advanced Materials and Nanobiotechnology Laboratory, Department of Bioengineering, University of Illinois, Chicago, IL, USA).

2015

Peter W. Voorhees (Materials Science and Engineering, Northwestern University, USA), Rafal Dunin-Borkowski (Ernst Ruska-Centre for Microscopy and Spectroscopy with Electrons and Peter Grünberg Institute, Forschungszentrum Jülich, Germany), Hannes Lichte (Triebenberg Laboratory, Institute of Structure Physics, Technische Universität Dresden, Germany), Robert Sinclair (Department of Materials Science and Engineering, Stanford University, Stanford, United States), Velimir Radmilović (Nanotechnology and Functional Materials Center, Faculty of Technology and Metallurgy, University of Belgrade, Belgrade, Serbia), Richard W. Siegel (Materials Science and Engineering Department, Rensselaer Polytechnic Institute, Troy, New York USA), Knut W. Urban (Research Center Juelich, Juelich, Germany), Harald Rose (University of Ulm, Ulm, Germany), Max. Haider (CEOS GmbH, Heidelberg, Germany), Wolfgang Jäger (Institute of Materials Science, Christian-Albrechts-University of Kiel,

Kiel, Germany), Kyung-Ho Shin (Korea Institute of Science and Technology, Seoul, Korea), Kwang Ho Kim (School of Materials Science and Engineering, Pusan National University, Busan, Korea), Ferdinand Hofer (Institute for Electron Microscopy and Nanoanalysis, Graz University of Technology, Graz, Austria), Barry Carter (Dept of Chem. & Biomolec. Engng, U. of Connecticut, Storrs, USA), Erdmann Spiecker (Institute of Micro- and Nanostructure Research & Center for Nanoanalysis and Electron Microscopy (CENEM), University of Erlangen-Nürnberg, Erlangen, Germany), Robert Hull (Rensselaer Polytechnic Institute, Troy NY, USA), Davor Pavuna (Physics of Complex Matter, EPFL, Lausanne, Switzerland), Neven Barišić (Institute of Solid State Physics, Vienna University of Technology, Vienna, Austria), Hamish Fraser (The Ohio State University, Columbus, Ohio, USA), Michael Mills (The Ohio State University, Center for Electron Microscopy and Analysis (CEMAS), Columbus, OH, USA), James Wittig (Materials Science and Engineering, Vanderbilt University, Nashville, Tennessee, USA), Rostislav Andrievski (Institute of Problems of Chemical Physics, Russian Academy of Sciences, Chernogolovka, Moscow Region, Russia), Peter Rogl (Christian Doppler Laboratory for Thermoelectricity, Wien, Austria), Mamoru Senna (Faculty of Science and Technology, Keio University, Yokohama, Japan), Philippe Colomban (Sorbonne Universités, UPMC Univ Paris, Paris, France), Ramon Alvarez-Puebla (Institució Catalana de Recerca i Estudis Avançats (ICREA), Barcelona, Spain), Eva **Olsson** (Department of Applied Physics, Chalmers University of Technology, Gothenburg, Sweden), Gyula Eres (Oak Ridge National Laboratory, Oak Ridge, USA), Ai Leen Koh (Stanford Nanocharacterization Laboratory, Stanford University, CA, USA), Milenko Plavšić (Faculty of Technology and Metallurgy, University of Belgrade, Belgrade, Serbia).

2016

Takuzo Aida (The University of Tokyo and RIKEN Center for Emergent Matter Science, Tokyo, Japan), Freddy Boey (Nanyang Technological University, School of Materials Science and Engineering, Singapore), Heinrich Hofmann (Powder Technology Laboratory, Institute of Materials, Ecole Polytechnique Federale de Lausanne, Switzerland), Robert Sinclair (Dept. of Materials Science & Engineering, Stanford University, Stanford, USA), Velimir R. Radmilović (Serbian Academy of Sciences and Arts, Belgrade, Serbia), Rafal Dunin-Borkowski (Ernst Ruska-Centre for Microscopy and Spectroscopy with Electrons and Peter Grunberg Institute, Forschungszentrum Julich, Julich, Germany), Reine Wallenberg (nCHREM, Inst. for Chemistry, Sweden), Ai Leen Koh (Stanford Nano Shared Facilities, Stanford University, Stanford, USA), Eva Olsson (Department of Physics, Chalmers University of Technology, Gothenburg, Sweden), Gianluigi Botton (McMaster University, Department of Materials Science and Engineering, Hamilton, Ontario, Canada), Jordi Arbiol (Institució Catalana de Recerca i Estudis Avançats (ICREA), Barcelona, CAT, Spain), Hamish Fraser (Center for the Accelerated Maturation of Materials, Department of Materials Science and Engineering, The Ohio State University, Columbus, OH, USA), Yuichi Ikuhara (Institute of Engineering Innovation, The University of Tokyo, Tokyo, Japan), Dominique Chatain (Aix-Marseille University, CNRS, CINaM, Marseille, France), Wayne Kaplan (Department of Materials Science and Engineering, Technion - Israel Institute of Technology, Israel), Kazu Suenaga (Advanced Industrial Science and Technology, Ibaraki, Japan), Jamie Warner (Department of Materials, University of Oxford, UK), Francois Peeters (Department Physics, University of Antwerp, Groenenborgerlaan, Antwerpen, Belgium), Maria Varela (Facultad de CC. Fisicas & Instituto Pluridisciplinar, Universidad Complutense de Madrid, Madrid, Spain), László Forró (Laboratory of Physics of Complex Matter, Ecole Polytechnique Fédérale de Lausanne, Lausannes, Switzerland), Danilo Suvorov (Advanced Materials Department, Jožef Stefan Institute, Liubliana, Slovenja), Mamoru Senna (Faculty of Science and Technology, Keio University, Japan), Eiji Osawa (NanoCarbon Research Institute Limited, Ueda, Japan), Dangsheng Su (Dalian Institute of Chemical Physics, Chinese Academy of Science, Dalian, China), Serena Best (University of Cambridge, UK), Wolfgang Jäger (Institute of Materials Science, Christian-Albrechts-University of Kiel, Kiel, Germany), Max Avdeev (Australian Nuclear Science and Technology Organisation, Lucas Heights, Australia), Philippe Colomban (Sorbonne Universités, Paris, France), Rostislav A. Andrievski (Institute of Problems of Chemical Physics, Chernogolovka, Moscow Region, Russia), James Wittig (Interdisciplinary Materials Science, Vanderbilt University, Nashville, TN, USA), Feng-Huei Lin (National Health Research Institutes (NHRI), Taipei, Taiwan), Vuk Uskoković (Department of Biomedical and Pharmaceutical Sciences, Chapman University, Irvine, USA).

2017

Paul Weiss (California NanoSystems Institute and Departments of Chemistry & Biochemistry and Materials Science & Engineering, UCLA, Los Angeles, CA, USA), David C. Bell (Harvard John A. Paulson School of Engineering and Applied Sciences, Harvard University, Cambridge, MA, United States), Markus Antonietti (Max Planck Institute of Colloids and Interfaces, Research Campus Golm, Potsdam, Germany), Jeffrey Brinker (Sandia National Laboratories, New Mexico), Aharon Gedanken (Department of Chemistry, Bar-Ilan University, Ramat-Gan, Israel), Robert Sinclair (Dept. of Materials Science & Engineering, Stanford University, Stanford, USA), Xiaoging Pan (Department of Chemical Engineering and Materials Science, Department of Physics and Astronomy, University of California - Irvine, Irvine, California, USA), Eva Olsson (Department of Physics, Chalmers University of Technology, Sweden), Knut W. Urban (Peter Gruenberg Institute, Research Center Juelich, Germany), Rafal E. Dunin-Borkowski (Ernst Ruska-Centre for Microscopy and Spectroscopy with Electrons and Peter Grunberg Institute, Forschungszentrum Julich, Julich, Germany), Wolfgang Jäger (Institute for Materials Science, Christian-Albrechts-University of Kiel, Kiel, Germany), **Dominique Delille** (Materials & Structural Analysis (formerly FEI), Thermo Fisher Scientific. Achtseweg Noord, Eindhoven, The Netherlands), Richard W. Siegel (Materials Science and Engineering Department, Rensselaer Polytechnic Institute, Troy, New York, USA), Vladimir Torchilin (Center for Pharmaceutical Biotechnology and Nanomedicine, Northeastern University, Boston, USA), Hélder Santos (Division of Pharmaceutical Chemistry and Technology, Drug Research Program, Faculty of Pharmacy, and Helsinki Institute of Life Science, HiLIFE, University of Helsinki, Helsinki, Finland), Anne George (Brodie Tooth Development Genetics & Regenerative Medicine Research Laboratory, Department of Oral Biology, University of Illinois at Chicago, Chicago, Illinois, USA), Horst Hahn (Institute of Nanotechnology, Karlsruhe Institute of Technology, Germany), Clive A. Randall (The Pennsylvania State University, USA), Hamish L. Fraser (Center for the Accelerated Maturation of Materials, The Ohio State University, Columbus, USA), Fu-Rong Chen (Dept. of Engineering and System Science, National Tsing Hua University, Hsin Chu, Taiwan), Martha R. McCartney (Arizona State University, USA), David J. Smith (Department of Physics, Arizona State University, Tempe, Arizona, USA), Quentin M. Ramasse

(SuperSTEM Laboratory, Daresbury, UK), Laurence D. Marks (Department of Materials Science and Engineering, Northwestern University, Evanston, USA), Ehrenfried Zschech (Fraunhofer IKTS Dresden, Germany), Joachim Mayer (Central Facility for Electron Microscopy, RWTH Aachen University, Aachen, Germany), Wayne D. Kaplan (Department of Materials Science and Engineering, Technion - Israel Institute of Technology, Technion City, Haifa, Israel), Michel W. Barsoum (Department of Materials Science and Engineering, Drexel University, Philadelphia, USA), Yimei Zhu (Department of Condensed Mater Physics and Materials Science, Brookhaven National Upton, USA), Peter Rogl (Christian Doppler Laboratory for Laboratory. Thermoelectricity at the Institute of Materials Chemistry and Research. University of Vienna, Vienna, Austria), Zoran Popović (Center for Solid State Physics and New Materials, Institute of Physics, University of Belgrade, Belgrade, Serbia), Matjaž Spreitzer (Advanced Materials Department, Jožef Stefan Institute, Ljubljana, Slovenia), **Vuk Uskoković** (Department of Biomedical and Pharmaceutical Sciences, Chapman University, Irvine, USA).



YUCOMAT 2017- First Plenary speakers, from left to right Paul Weiss, California NanoSystems Institute and Departments of Chemistry & Biochemistry and Materials Science & Engineering, UCLA, Los Angeles, CA, USA David C. Bell, Harvard John A. Paulson School of Engineering and Applied Sciences, Harvard University, Cambridge, MA, United States Markus Antonietti, Max Planck Institute of Colloids and Interfaces, Potsdam, Germany Jeffrey Brinker, Sandia National Laboratories, New Mexico, USA Aharon Gedanken, Department of Chemistry, Bar-Ilan University, Ramat-Gan, Israel

2018

Yury Gogotsi (Department of Materials Science and Engineering, and A. J. Drexel Nanomaterials Institute, Drexel University, Philadelphia, USA), Joseph T. Hupp (Northwestern University Department of Chemistry Evanston, IL USA), Darrell G. Schlom (Department of Materials Science and Engineering, Cornell University, USA), Knut W. Urban (PGI-5 and Ernst Ruska Center, Research Center Juelich, Juelich/Germany), Ramamoorthy Ramesh (Department of Physics and Department of Materials Science and Engineering Lawrence Berkeley National Laboratory, University of California, Berkeley, CA, USA), Harald Rose (Ulm University, Ulm, Germany), Rafal E. Dunin-Borkowski (Ernst Ruska-Centre for Microscopy and Spectroscopy with Electrons and Peter Grunberg Institute, Forschungszentrum Julich, Julich, Germany), Eva Olsson (Chalmers University of Technology, Eva Olsson Group, Gothenburg, Sweden), Rolf Erni (Electron Microscopy Center, Empa, Swiss Federal Laboratories for Materials Science and Technology, Dubendorf, Switzerland), Bela Pecz (Institute for Technical Physics and Materials Science, Centre for Energy Research, Hungarian Academy of Sciences, MTA EK MFA, Budapest, Konkoly-Thege M., Hungary), Wayne D. Kaplan (Department of Materials Science and Engineering, Technion - Israel
Institute of Technology, Haifa, Israel), Anil Yalcin (Thermo Fisher Scientific, Eindhoven, Netherlands), Ehrenfried Zschech (Fraunhofer IKTS Dresden, Germany), Robert Sinclair (Department of Materials Science and Engineering, Stanford University, Stanford, United States), Vladimir Torchilin (Center for Pharmaceutical Biotechnology and Nanomedicine, Northeastern University, Boston, United States), Vuk Uskoković (University of Illinois at Chicago, USA), Mamoru Senna (Keio University, Yokohama, Japan Faculty of Science and Technology, Hiyoshi, Yokohama, Japan), Paul V. Braun (University of Illinois at Urbana-Champaign, Urbana, USA), Peter Rogl (Institute of Materials Chemistry & Research, University of Vienna, Vienna, Austria), Danilo Suvorov (Advanced Materials Department, Jožef Stefan Institute, Liubljana, Slovenia), Richard LeSar (lowa State University, Department of Materials Science and Engineering, Ames, IA, USA), Hamish L. Fraser (Center for the Accelerated Maturation of Materials, The Ohio State University, Columbus, USA), Gunther Eggeler (Bochum University, Ruhr, Germany), Davor Pavuna (Complex Matter Laboratory - Institute of Physics, Ecole Polytechique Federale de Lausanne, CH-1015 Lausanne, Switzerland). Richard W. Siegel (Materials Science and Engineering Department, Rensselaer Polytechnic Institute, Troy, New York, USA), Vikram Jayaram (Indian Institute of Science, Department of Materials Engineering, Bangalore, India), Karoly Holczer (UCLA, Department of Physics & Astronomy Portola Plaza, Los Angeles, CA, USA), Toshiaki Makabe (Keio University, Japan), Emil Babić (Department of Physics, Faculty of Science, University of Zagreb, Zagreb, HR, Croatia), Yuriy Solonin (Institute for Problems of Materials Sciences National Academy of Sciences of Ukraine, Ukraine).



YUCOMAT 2018 - First Plenary speakers, from left to right Yury Gogotsi, Drexel University, Philadelphia, PA, USA Joseph T. Hupp, Northwestern University, Evanston, IL, USA Darrell G. Schlom, Cornell University, Ithaca, NY, USA Knut W. Urban, Research Center Juelich, Juelich, Germany Ramamoorthy Ramesh, University of California, Berkeley, CA, USA

2019

Mohammad Khaja Nazeeruddin (The Group for Molecular Engineering of Functional Materials, Ecole Polytechnique Fédérale de Lausanne, Sion, Switzerland), Andrea C. Ferrari (Cambridge Graphene Centre, University of Cambridge, Cambridge, United Kingdom), Colin Humphreys (School of Engineering and Materials Science, Queen Mary University of London, London United Kingdom), Elvira Fortunato (i3N/CENIMAT, Department of Materials Science from Faculty of Science and Technology, Universidade NOVA de Lisboa and CEMOP/UNINOVA, Campus de Caparica, Caparica, Portugal), Yoshio Bando (Institute of Molecular Plus, Tianjin University, Tianjin, China), Rafal Dunin-Borkowski (Ernst Ruska-Centre for Microscopy and Spectroscopy with Electrons and Peter Grünberg Institute, Forschungszentrum

Jülich, Jülich, Germany), Robert Sinclair (Department of Materials Science and Engineering, Stanford University, Stanford, United States), Vladimir Torchilin (Center for Pharmaceutical Biotechnology and Nanomedicine, Northeastern University, Boston, United States). Milan Mrksich (Department of Biomedical Engineering and Chemistry. Northwestern University, Evanston, IL, United States), Sotiris Pratsinis (Particle Technology Laboratory, Institute of Process Engineering, Swiss Federal Institute of Technology (ETH Zurich), Zurich, Switzerland), Aharon Gedanken (Bar-Ilan University Department of Chemistry, and the BINA center, Ramat-Gan, Israel), Vuk Uskoković (Department of Mechanical and Aerospace Engineering, University of California, Irvine, CA, United States), Yuntian Zhu (Nano & Heterogeneous Materials Center, Nanjing University of Science and Technology, Nanjing, China), Hamish L. Fraser (Center for the Accelerated Maturation of Materials, Department of Materials Science and Engineering, The Ohio State University, Columbus, OH, United States), Mamoru Senna (Faculty of Science and Technology, Keio University, Hiyoshi, Yokohama, Japan), Shizhang Oiao (School of Materials Science and Engineering, Tianjin University, Tianjin, China), **Richard Catlow** (Department of Chemistry, University College London, London. United Kingdom). Peter Franz Rogl (Institute of Materials Chemistry. University of Vienna, Austria), Dae-Hong Ko (Department of Materials Science and Engineering, Yonsei University, Seoul, Republic of Korea), Nobuo Tanaka (Institute of Materials and Systems for Sustainability (IMaSS), Nagoya University, Nagoya, Japan), Maarten Wirix (Thermo Fisher Scientific, Eindhoven, Netherlands).



YUCOMAT 2019 - First Plenary speakers, from left to right Mohammad Khaja Nazeeruddin, Ecole Polytechnique Fédérale de Lausanne, Switzerland Andrea C. Ferrari, University of Cambridge, Cambridge, United Kingdom Colin Humphreys, Queen Mary University of London, London, United Kingdom Elvira Fortunato, Universidade NOVA de Lisboa, Lisbon, Portugal Yoshio Bando, Tianjin University, Tianjin, China

MRS-Serbia awards

Award for a lasting and outstanding contribution to the founding and development of the materials society of serbia as well contribution to the materials science and engineering

2020



Dragan P. Uskoković is widely recognized as a distinguished scientist, educator and organizer in materials science and engineering, especially in synthesis, processing and application of nanoparticles, science, and technology of sintering and advanced functional materials in various fields of nanotechnology. His main research areas include synthesis of metallic, ceramic, and composite nanoparticles by molecular designing; rapidly solidified and amorphous systems; sintering and sintered materials; new methods

for consolidation of amorphous powders by shock compaction; synthesis, characterization, and application of biomedical materials; electrode materials for lithium-ion batteries; and functionally graded materials. He was born on April 3, 1944 in Cetinje, Montenegro, where he finished primary school in 1958 and grammar school in 1962. He graduated from the Faculty of Technology and Metallurgy at Belgrade University in 1967, earned the master's degree in 1971 and authored the doctoral dissertation "Study of Basic Processes Occuring during Sintering of Crystalline Materials" in 1974. He started his research at the Vinča Institute of Nuclear Sciences, Belgrade in 1968, and just before earning the doctoral degree in July 1974, he accepted the offer to continue research in the new Sintering Department at the Institute of Technical Sciences of the Serbian Academy of Science and Arts in Belgrade. He was elected in all scientific and academic titles and was the director of the Institute from 2001 until 2011. He was a professor at the Belgrade University and at the International Postgraduate Jožef Stefan Institute School in the program on Nanoscience and Nanotechnologies. Until now, he published one monograph of international reputation (Activated Sintering, with G. V. Samsonov and M. M. Ristić), and co-edited two books published by Plenum Press, SINTERING '85 (with G. S. Kuczynski, H. Palmour III and M. M. Ristić), and Science of Sintering: New Directions for Materials Processing and Microstructural Control (with H. Palmour III and R. M. Spriggs), a series of eight books published by Trans Tech Publication, Zurich, Switzerland, and more recently a book Nanotechnologies in Preventive and Regenerative Medicine in collaboration with Vuk

Uskokovic, Elsevier, 2018. Under his guidance more than twenty Master theses and the same number of Ph.D. dissertations were prepared. He managed more than 20 scientific research projects in basic and technological research and several international projects with leading institutions (Max-Planck-Institute for Metals Research, Stuttgart, Germany, Kyoto University, National Institute of Standards and Technology, Gaithersburg, USA, Korean Institute for the Science and Technology, Seoul, Korea, and many Academy Institutes of ex-Soviet Union and Russia and Ukraine). According to Scopus, he published 255 articles, many of which in high-ranking journals, cited a significant number of times. He also held more than 100 invited lectures worldwide at different international Conferences or world-leading research centers and published numerous articles locally. Among the honors and awards, some of the distinguished ones are the 2007 Belgrade City Award for Natural and Technical Sciences (with Nenad Ignjatović) for the book Calcium Phosphate Ceramics-Bioresorbable Polymer Composites Biomaterials: From synthesis to applications (1999-2007); Ukrainian Materials Research Society with the Samsonov's ensign, for outstanding achievements in materials research in 2012; and Honorary diploma by the International Institute for the Science of Sintering, New Delhi, 1983. He is a long-term member of the International Institute for the Science of Sintering, where he is a President (of the Presidential Board). He was a Coordinator of the national programs with European Union, as well as a Program Committee member of many international conferences and journals. He is a founder and President of Materials Research Society of Serbia, which held 21 YUCOMAT conferences in Herceg-Novi, Montenegro, between 1995 and 2019. His co-edited proceedings were published by Trans Tech Publications LTD, Zurich in the Materials Science Forum Edition and then in the journals Materials and Manufacturing Processes, Surface Engineering, Acta Physica Polonica, and International Journal of Modern Physics B. He was elected the full member of Academy of Engineering Science of Serbia (AESS) in 2004, and the Secretary of its Technology, Metallurgy and Materials Department (2008 - 2019).

Annual award for a lasting and outstanding contribution to materials science and engineering

2015



Ivan Božović, Brookhaven National Laboratory, Yale University, Upton, New York, USA.

He is widely recognized as the world leader in the Materials Science of superconductors, and in atomic-layer engineering of new materials. Indeed, in 2012 he received the Berndt Matthias Prize for Materials Aspects of Superconductivity, the highest prize in this field. He is generally viewed as the pioneer in developing the ALL-MBE technique; this was recognized by the 2004 SPIE Technology

Prize (usually awarded to institutions and rarely to individuals) and the 2008 BNL Science and Technology Award. He is the inventor of Combinatorial molecular beam epitaxy technique (COMBE — European Patent EP1161986, publ. date 12.12.2001). He is also a leading condensed matter physicist, as evidenced by the 2013 Max Planck Lecture and gold medal from MPI. He was elected a Fellow of American Physical Society (1998) and Fellow of International Society of Optical Engineering (s1997), as well as a Foreign Member of SANU (2009) and a member of Academy of Science of Europe

(2014). He is credited with the discovery of Interface Superconductivity (U.S. Patent No. 8,204,564 and Nature 2008), which is now a fast-growing field, and one can anticipate that he will receive even higher recognitions in the future. While most of his work belongs to basic, fundamental research, some of it has been patented and has reached the market. For example, COMBE systems are being built by leading oxide-MBE manufacturers in USA (Veeco), Great Britain (Ilica), and Finland (DCA). While I have not researched the market data in detail, note that one COMBE system may cost up to 2-3 M\$, and perhaps a dozen are sold per year, so the financial effects are already substantial. Of course, Interface superconductivity, while still very early in its development, has a tremendous potential for ultrafast yet low-power-consumption electronics — it could grow to a multi-billion \$ per year market. Last but not least, Ivan has done much service to the scientific and academic communities in former Yugoslavia. Europe, and US. He used to be the Dean of Physics at Belgrade University, and has maintained close ties and active collaboration with scientists in Serbia, including personal donations and financial support for stipends, journals, and books, and for conference organization.

Lecture: Atomic-Layer Engineering and High-Tc Superconductivity in Cuprates

2016



Gordana Vunjak-Novaković, Columbia University, Department of Biomedical Engineering, Laboratory for Stem Cells and Tissue Engineering, New York, NY, USA

She is a world leader in Tissue Engineering and Regenerative Medicine, two fields of very active research connecting Materials Science and Biomedical Engineering. She has been one of the real pioneers in this field. Tissue engineering approaches are now finding application in regenerative medicine (repair of human tissues),

study of disease ("organs on a chip" systems for drug development) and fundamental research (studies of development and disease) towards improving the quality of human life. Her sustained efforts to develop relations between Materials science and Biomedical engineering span over three periods of scientific activity: at Belgrade University (1974-1994), at the Harvard-MIT Division for Health Science and Technology (1993-2005), and at Columbia University (2005- present). She is the Mikati Foundation Professor of Biomedical Engineering and a Professor of Medical Sciences at Columbia University where she directs the Laboratory for Stem Cells and Tissue Engineering. Among her many recognitions, Gordana was elected to the American Institute for Medical and Biological Engineering (2000), inducted into the Women in Technology International Hall of Fame "for developing biological substitutes to restore, maintain or improve tissue function" (2008), and received the Clemson Award of the Biomaterials Society "for significant contributions to the literature on biomaterials" (2009). She gave the Director's lecture at the NIH in 2007, as the first woman engineer to receive this distinction. She was elected to the New York Academy of Sciences (2009), Academia Europaea (2012) for contributions to translational research, and the Serbian Academy of Sciences and Arts (2012) for contributions to biology and chemistry. She is a Fellow of the Biomedical Engineering Society (2009), a Fellow of the AAAS (2014), a Founding Fellow of the International Society for Tissue Engineering and Regenerative Medicine (2013), and one of the Foreign Policy's 100 Leading Global Thinkers for 2014. She was elected to the National Academy of Engineering (NAE, 2012) "for bioreactor systems and modeling approaches for tissue engineering and regenerative medicine", as the first woman at Columbia University to ever receive this highest recognition, to the National Academy of Medicine (2014) and the National Academy of Inventors (2014).

Lecture: Cell-Instructive Biomaterials for Tissue Engineering: Applications in Regenerative Medicine and Study of Disease

2017



Velimir Radmilović, Serbian Academy of Sciences and Arts, Belgrade, Serbia

Dr Radmilović is widely recognized as a distinguished researcher in several areas of Material Science and Engineering, particularly in the fields of Physical Metallurgy, Phase Transformations, Nanoscience and Nanotechnology. He obtained his Ph.D. in Physical Metallurgy from University of Belgrade in 1985. In 1986 he joined Department of materials science,

University of California at Berkeley, as a postdoctoral research associate before taking faculty position at University of Belgrade in 1987, as an assistant professor, where he became associate professor in 1991 and full professor in 1995. In 1987, he was invited to be a visiting assistant professor at University of California, Berkeley. In 1992 he was visiting research professor at the Department for Materials Science and Engineering, University of Pittsburgh, Pennsylvania. From 1999 through 2010 he was staff scientist and principal investigator at the National Center for Electron Microscopy, Lawrence Berkeley National Laboratory, and member of a team for development and implementation of the next generation transmission electron aberration-corrected microscopes (TEAM Project). In 2010, he returned to University of Belgrade. His research interest focuses on fundamental aspects of solid state phase transitions and interfaces, structure-property relationships in engineering materials, application of high resolution electron microscopy and spectroscopy, supported by computer modeling and simulation, in study of nanomaterials at atomistic scale, including nanowires, thin films for micro electro-mechanical and nano electro-mechanical systems (MEMS and NEMS), graphene, carbon nanotubes, carbon nanotube based nanocomposites and devices, thermoelectrics, catalysts, core/shell nanostructures, solar cells, etc. Velimir Radmilović is recepient of many awards including: Fulbright Scholar, Outstanding performance award from Lawrence Berkeley National Laboratory-University of California at Berkeley, the Belgrade City Award for Natural and Technical Sciences, The European Microscopy Society Outstanding Paper Award, the best lecturer award, the Most successful scientist award given by the Ministry of Science and Education of Government of Serbia, Honorary member of Academy of Engineering Sciences of Serbia (AISS), and Corresponding member of Serbian Academy of Sciences and Arts. During his stay at Berkeley he has maintained close ties and active collaboration with scientists in Serbia, Slovenia and Montenegro, and has been helping scientists from Europe in developing scientific proposals, sitting on M.Sc. and Ph.D. thesis committees, etc.

Lecture: Atomistic Phenomena in Engineering Materials



László Forro, Laboratory of Physics of Complex Matter, Ecole Polytechnique Fédérale de Lausanne, Switzerland

Prof Forro is one of the world's leading researchers in the experimental physics of condensed matter, and in the last ten years he has expanded his interest to biological systems. He has been a full professor at the Federal Polytechnic School in Lausanne (École Polytechnique Fédérale de Lausanne) since 2002.

He began his scientific activity in Paris by measuring and interpreting the physical properties of quasi-dimensional organic and inorganic conductors. He continued on high-temperature cuprous superconductors, some of which he synthesized himself. Already in 1991, he got involved in the early phase of research on conductive fullerenes, from which today's nanophysics and nanotechnology originate, and I discovered an important fullerene. He applied this expertise to biosystems by measuring their chosen physical properties. For example, measuring the optical conductivity of an oriented nanoparticle using a synchrotron infrared microscope has opened up a whole research program in the field of amyloid-related diseases such as Alzheimer's and Huntington's disease and multiple sclerosis. His observation that the proximity of the nanotubes significantly affects the proliferation of living cells is a remarkable response.

Laszlo Forro holds the Chair of Nanostructures and Novel Electronic Materials at Ecole Polytechnique Fédérale de Lausanne, Switzerland. He is leading an interdisciplinary research activity, ranging from novel electronic materials, through functional nanostructures to biomaterials. He puts strong emphases on the study of health hazards of nanostructures like carbon nanotubes, graphene, boron nitride nanowires and lately of photovoltaic perovskites. In his Laboratory of Physics of Complex Matter, he is leading an interdisciplinary research activity. Within the School and beyond he tries to create an experiment-driven partnership with a scientific focus on correlated matter, the design of new nanostructured materials and biological physics.

He is a Member of the Hungarian Academy of Sciences, Member of the Croatian Academy of Sciences, Member of the Serbian Academy of Sciences and Arts and Doctor Honoris Causa of the University of Szeged, Hungary.

Lecture: Organo-Metallic Lead Iodide Perovskites: A Material Science Approach

2019



Danilo Suvorov, Advanced Materials Department, Jožef Stefan Institute, Ljubljana, Slovenia

Suvorov's principle scientific interests were in the field of ceramic materials, including 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 the 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 to 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 industryfinanced projects with Slovene and foreign industrial partners. D. Suvorov is a Professor of Materials Science at University of Liubliana 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. 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. 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, Prof. Suvorov certainly contributed to the development of Serbian science. Lecture: Epitaxial Integration of Oxides with Silicon

2020



Robert Sinclair, Materials Science and Engineering Department, Stanford University, Stanford, CA, USA

Among the many achievements of Prof. Robert Sinclair were his seminal contributions to in-situ transmission electron microscopy at the atomic level under controlled conditions, phase equilibria in complex thin film systems, nanoscale interactions in soft matter, and his contributions to the understanding of atomic arrangements in solids, including those at crystal defects and

interfaces and their applications to martensitic transformations, diffusion in solids, crystallization of amorphous phases in semiconductor systems, perpendicular magnetic storage media, quantum dot solar cells, nanoparticles conjugated in biological systems for cancer research, hydrogen storage media, *etc.*, and for his outstanding academic and professional leadership. In addition, it is important to emphasize Profe. Sinclair's pivotal role in helping to promote the YUCOMAT Conference Series to the prominent European scientific materials research meetings, as a long-term President of the International Advisory Board, and a plenary speaker at many YUCOMAT events.

Robert (Bob) Sinclair received his B.A., M.A., and Ph.D. in Materials Science from Cambridge University. He came to the United States in 1973., as a postdoctoral researcher at the University of California, Berkeley, before joining Stanford as faculty in 1977., and is currently the Charles M. Pigott Professor in the School of Engineering at Stanford University. Bob has had several visiting positions internationally including Chalmers University, Seoul National University, Centre d'Etudes Nucleaires in Grenoble, Cambridge University, Oxford University, Matsushita Industrial Semiconductor Research Center in Osaka, National Institute for Materials Science, Japan, *etc.* Professor Sinclair was Department Chair from 2004 to 2014, Director of the Stanford Nanocharacterization Laboratory for twelve years since its inception in 2002, Director of the Bing Overseas Studies Program of Stanford University, during 2010-2012., and Director of the Wallenberg Research Link. Professor Sinclair was Chair of the National Research Council committee to study "Midsize Facilities: The Infrastructure for Materials Research," published in 2006. Professor Sinclair is a recipient of many Honors & Awards, let's name a few recent: Jubilee Professor, Chalmers University (2017); John M. Cowley Distinguished Lecturer, Arizona State University (2015); David Turnbull Lectureship Award, Materials Research Society (2012); Distinguished Scientist, Physical Sciences, Microscopy Society of America (2009), etc.

Lecture: In situ High Resolution Electron Microscopy of Material Reactions, at the Atomic Level, postponed to 2021 due to COVID-19 pandemic

Awarded PhD, MSc, oral and poster presentations

Materials Research Society of Serbia awards the authors (preferable young members under 35) of the best oral and poster presentation at the conference, and also the authors of highly rated PhD and MSc theses defended between two conferences. Awarded researchers are granted free registration at the next YUCOMAT Conference.

1999

Poster presentation: Smilja Marković (Faculty of Physical Chemistry, University of Belgrade, Serbia), Sinteza nanostrukturnih alumosilikatnih/Ni-spinel keramičkih kompozita iz zeolita.

2001

PhD thesis: Petar Uskoković (Faculty of Technology and Metallurgy, University of Belgrade, Serbia), Karakterizacija mehaničkih svojstava jednoosnih hibridnih kompozitnih materijala primenom optičkih vlakana.

MSc thesis: Ljiljana Damjanović (Faculty of Physical Chemistry, University of Belgrade, Serbia), Antiferomagnetni fazni prelaz kalijum-elektro-sodalita.

2003

PhD thesis: Gordana Ćirić-Marjanović (Faculty of Physical Chemistry, University of Belgrade, Serbia), Electrochemical polymerisation of 1-naphtalenamine and its derivatives.

MSc thesis: Smilja Marković (Faculty of Physical Chemistry, University of Belgrade, Serbia) Synthesis and characterisation of carnegite prototypes.

Oral presentation: Tanja Damjanović (TU Clausthal, Institut für Metallurgie, Clausthal-Zellerfeld, Germany), Sol-gel route for electrophoretic deposition of mullite diffusion barriers on C/C-Si-SiC–composites.

Poster presentation: Jasmina Grbović (Vinča Institute of Nuclear Sciences, Department of Material Science, University of Belgrade, Serbia), Microstructural characterization of Mg-C nanocomposites.

PhD thesis: Slobodanka Galović (Faculty of Electrical Engineering, University of Belgrade, Serbia), Modelling and analysis of photothermal signals for the environments with thermal memory.

MSc thesis: Siniša Vučenović (Faculty of Electrical Engineering, University of Belgrade, Serbia), Dielectric properties of molecular nanocrystalline structures.

Oral presentation: Jelena Ristić (ISOM-Dept. Ingeniería Electrónica, Universidad Politécnica, Madrid, Spain), GaN/AlGaN nanocavities with AlN/GaN bragg reflectors grown in AlGaN nanocolumns by plasma-assisted MBE.

Poster presentation: Slavica Spasović (Faculty of Physics, University of Belgrade, Belgrade, Serbia), Dielectric, spectral and raman scattering studies of Nd-doped SrTiO₃ single crystal.

2005

MSc thesis: Nina Obradović (Institute of Technical Sciences, Serbian Academy of Sciences and Arts, Belgrade, Serbia), Sintering of ZnO-TiO₂ system.

Oral presentation: Nenad Marjanović (Linz Institute for Organic Solar Cells, Johannes Kepler University, Linz, Austria), Photoinduced effects in conjugated polymer/fullerene based organic field-effect transistors (photOFTEs); **Jelena Radovanović** (Institute for Physics, Belgrade, Serbia), Optimization of semimagnetic semiconductor-based nanostructures for spintronic applications.

Poster presentation: Tamara lvetić (Institute of Technical Sciences, Serbian Academy of Sciences and Arts, Belgrade, Serbia), Photoacoustic properties of thin film zinc-stannate; **Dejan Miličević** (Vinča Institute for Nuclear Sciences, Belgrade, Serbia), Gamma irradiation of oriented polyolefins. I. Gel content study; **Igor Balać** (Faculty of Mechanical Engineering, University of Belgrade, Serbia), Potentials of FCC unit cell in predictive modeling of the mechanical properties of sphere reinforced particulate composites and solids with spherical voids.

2006

PhD thesis: Željka Nikitović (Institute for Physics, Zemun, Serbia), Excitation coefficients for swarms of electrons and fast neutrals in He, Ne and O_2 .

MSc thesis: Magdalena Stevanović (Institute of Technical Sciences, Serbian Academy of Sciences and Arts, Belgrade, Serbia), Obtaining, morphology and structure of poly(DL-lactide-co-glycolide) powder and biocomposite poly(DL-lactide-co-glycolide)/biphasic calcium phosphate.

Oral presentation: Snežana Lazić (Autonomous University of Madrid, Spain), Raman scattering by the longitudinal optical phonons in InN nanocolumns and compact layers.

Poster presentation: Radenka Krsmanović (University of Antwerp, Belgium), Structural characterization of erbium - doped glass ceramic obtained with glass melting technique; **Marin Tadić** (Vinča Institute for Nuclear Sciences, Belgrade, Serbia), Effect of heat treatment on the formation of ε -Fe₂O₃ phase from hematite nanoparticles in silica matrix; **Ivana Jovanović** (Institute of Technical Sciences, Serbian Academy of Sciences and Arts, Belgrade, Serbia), The effect of processing parametars on characteristics of PLLA microspheres; **Irena Ičević** (Faculty of Medicine, University of Novi Sad, Serbia), Fullerenol-polidentate ligand.

PhD thesis: Nevena Puač (Institute for Physics, Zemun, Serbia), Development, diagnostics and application of microwave and radiofrequency plasma reactors.

MSc thesis: Ivana Stojković (Faculty of Physical Chemistry, University of Belgrade, Serbia), Structure and electrochemical properties of $\text{LiCr}_x\text{Mn}_2\text{-}xO_4$ synthesized by glycine-nitrate procedure.

Oral presentation: Matjaž Spreitzer (Jožef Stefan Institute, Ljubljana, Slovenia), Influence of crystal symmetry on the voltage-tunability of Na_{0.5}Bi_{0.5}TiO₃-based systems; **Vuk Uskoković** (Clarkson University, Potsdam, NY, USA), Preparation and multilayered aggregation of uniform colloidal cholesterol particles.

Poster presentation: Marko Virsek (Jožef Stefan Institute, Ljubljana, Slovenia), The W₁₈O₄₉ nanowires used for synthesis of the WS₂ nanotubes; **Aleksandra Krklješ** (Vinča Institute for Nuclear Sciences, Belgrade, Serbia), Radiolytic synthesis and characterization of PVA hydrogel-Au nanocomposites; **Ana Stanković** (Institute of Technical Sciences, Serbian Academy of Sciences and Arts, Belgrade, Serbia), Effects of organic surfactants on mechanochemically synthesized ZnO particles; **Bojana Nedić** (Faculty of Physical Chemistry, University of Belgrade, Serbia), Crystal structures of rare-earth doped hexacelsians.

2008

PhD thesis: Magdalena Stevanović (Institute of Technical Sciences, Serbian Academy of Sciences and Arts, Belgrade, Serbia), Synthesis, characterization and degradation of poly(DL-lactide-co-glycolide) nanospheres containing ascorbic acid.

MSc thesis: Marija Jevtić (Institute of Technical Sciences, Serbian Academy of Sciences and Arts, Belgrade, Serbia), Sonochemical synthesis and characterization of hydroxyapatite and poly (DL-lactide-co-glycolide)-hydroxyapatite composite.

Oral presentation: Sanja Ristić (Othmer-Jacobs Department of Chemical and Biological Engineering, Polytechnic University, Brooklyn, NY, USA), Using dielectric relaxation spectroscopy (DRS) and dynamic mechanical spectroscopy (DMS) to study molecular dynamics of dendrimers in hydrophobic/hydrophilic media.

Poster presentation: Joanne Kwon (Cambridge Centre for Medical Materials, University of Cambridge, Cambridge, U.K), Copolymer/bioceramic composite for coating orthopaedic implants; **Asja Veber** (Jožef Stefan Institute, Ljubljana, Slovenia), The thickness, morphology and structure of sol-gel Bi₁₂SiO₂₀ thin films; **Jelena Pavlicević** (Faculty of Technology, University of Novi Sad, Serbia), Thermal stability of model irregular poly(urethane-isocyanurate) networks; **Katarina Marinković** (Institute of Technical Sciences, Serbian Academy of Sciences and Arts, Belgrade, Serbia), Ureaassisted self-combustion aerosol synthesis of Y₃Al₅O₁₂:Ce³⁺.

2009

PhD thesis: Nadica Abazović (Vinča Institute of Nuclear Sciences, Belgrade, Serbia), Synthesis and characterization of nanomaterials based on titanium (IV) oxide.

MSc thesis: Zoran Stojanović (Institute of Technical Sciences, Serbian Academy of Sciences and Arts, Belgrade, Serbia), Hydrothermal synthesis of nanostructured oxide powders and their characterization.

Oral presentation: Ralph Kraehnert (Leibniz Institute for Catalysis at the University of Rostock, Branch Berlin, Germany), A synthesis toolbox for well-defined

catalyst coatings: nanoparticles of noble metals supported on mesoporous oxide film; **Marija Vukomanović** (Institute of Technical Sciences, Serbian Academy of Sciences and Arts, Belgrade, Serbia), Poly(D,L-lactide-co-glycolide)/hydroxyapatite/clindamycin core-shell nanospheres processed in the field of ultrasound.

Poster presentation: Agneszka Radziszewska (AGH University of Science and Technology, Faculty of Metals Engineering and Industrial Computer Science, Cracow, Poland), Nanostructured thin films β -Al-Mg obtained using PLD technique; **Rares Stiufiuc** (Babes-Bolyai University, Faculty of Physics, Cluj-Napoca, Romania), Atomic force microscopy characterization of gold nanocrystals; **Nikolina Pavlović** (Faculty of Technology, University of Novi Sad, Serbia), Synthesis of nanopowders and bismuth titanate-based ceramic processing.

2010

PhD thesis: Ivana Stojković (Faculty of Physical Chemistry, University of Belgrade, Serbia), Electrochemical intercalation of ion lithium from water solutions into electrode materials based on vanadium and manganese.

MSc thesis: Ljiljana Veselinović (Institute of Technical Sciences, Serbian Academy of Sciences and Arts, Belgrade, Serbia), X-ray analysis of calcium phosphate nanostructural powders obtained by new synthesis procedure.

Oral presentation: Daniel Kiener (Erich Schmid Institute of Materials Science, Austrian Academy of Sciences, Leoben, Austria), Influence of irradiation defects on the strength of copper at a nanometer scale.

Poster presentation: Goran Vuković (Faculty of Technology and Metallurgy, University of Belgrade, Serbia), Amino-functionalized carbon nanotubes as support for Pt nanocatalyst; **Lukasz Cieniek** (AGH University of Science and Technology, Cracow, Poland), Influence of reactive grinding parameters on the structure and properties of LaCaO₃ perovskite for PLD target; **Ladislav Čelko** (Brno University of Technology, Faculty of Mechanical Engineering, Institute of Material Science and Engineering, Brno, Czech Republic), Processing of aluminium-based in-situ composites using HVOF sprayed nickel coating; **Marija Perović** (Condensed Matter Physics Laboratory, Vinča Institute of Nuclear Sciences, University of Belgrade, Serbia), Aging and memory effects in interacting nanoparticle system La_{0.7}Ca_{0.3}MnO₃ obtained by a mechanochemical synthesis.

2011

PhD thesis: Marija Vukomanović (Institute of Technical Sciences, Serbian Academy of Sciences and Arts, Belgrade, Serbia, Jozef Stefan Institute, Ljubljana, Slovenia), Controlled release of antibiotics from poly(D,L-lactide-co-glicolide)/hydroxyapatite nanospheres synthesized in ultrasound field.

MSc thesis: Mirjana Lalović (Department of Chemistry, Biochemistry and Environmental Protection, Faculty of Sciences, University of Novi Sad, Novi Sad, Serbia), Synthesis and structures of copper (II) complexes with pyridoxal-aminoguanidine as primary ligand.

Oral presentation: Tatyana Demina (Enikolopov Institute of Synthetic Polymer Materials, Russian Academy of Sciences, Moscow, Russia), Effect of plasma modification on surface properties and chemical structure of chitosan/gelatin/PLLA films.

Poster presentation: Iryna Fedorchenko (Kurnakov Institute of General and Inorganic Chemistry, Russian Academy of Sciences, Moscow, Russia), Growth and magnetic properties of insb-mnsb eutectic composition; **Bojana Mojić** (Department of Materials Engineering, Faculty of Technology, University of Novi Sad, Novi Sad, Serbia), Synthesis of ferrite core/silica shell nanoparticles; **Željka Antić** (Vinča Institute of Nuclear Sciences, University of Belgrade, Serbia), Preparation, characterization and upconversion of Er3+ doped yttrium-lutetium oxide nanophosphor.

2012

Oral presentation: Timothy J. Pennycook (SuperSTEM, Daresbury, UK), White light emission from fluctuating nanoclusters.

Poster presentation: Goran Casar (Jožef Stefan Institute, Ljubljana, Slovenia), Influence of stretching on dielectric, electromechanical and electrocaloric response of P(VDF-TrFE-CFE) terpolymer; **Miodrag Lukić** (Institute of Technical Sciences, Serbian Academy of Sciences and Arts, Belgrade, Serbia), Synergistic effect of hydroxyapatite nanopowders' high crystallinity and non-ordered particles' boundary regions on lowtemperature sintering; **Jakub Širc** (Institute of Macromolecular Chemistry of the AS CR, v.v.i., Prague, Czech Republic), Multilayer nanofibrous constructs with incorporated gentamicin for controlled drug release.

2013

PhD thesis: Milica Vujković (Faculty of Physical Chemistry, University of Belgrade, Serbia), Influence of $Li_4Ti_5O_{12}/C$ and $LiFePO_4/C$ composites synthesis conditions on the kinetics of lithium intercalation in organic and aqueous electrolytic solutions.

Oral presentation: Mirella Di Lorenzo (Department of Chemical Engineering, University of Bath, Bath, UK), High surface area gold micro-electrodes for sensing and fuel cell applications.

Poster presentation: Eliezer Jäger (Institute of Macromolecular Chemistry, Academy of Sciences of the Czech Republic, Prague, Czech Republic), Self-assembled micellar nanoparticles of a novel block copolymer based on poly-[2-(diisopropylamino) ethyl methacrylate (PDPA) core and *n*-(2-hydroxypropyl)methacrylamide (HPMA) corona for pH-triggered drug release; **Elena Dedova** (Institute of Strength Physics and Materials Science SB RAS, Russia), The study of properties of zirconium tungstate obtained the hydrothermal synthesis; **Vuk Radmilović** (Faculty of Technology and Metallurgy, University of Belgrade, Serbia), Structure and properties of polyvinyl butyral based nanocomposites.

2014

Oral presentation: Nemanja Aničić (Jožef Stefan Institute, Ljubljana, Slovenia), The role of the morphology and structural characteristics on the solubility of vanadium pentoxide-PLGA composites.

Poster presentation: Aleksei Utkin (Institute of Solid State Chemistry and Mechanochemistry, Russian Academy of Sciences, Novosibirsk, Russia), Synthesis of $ZrGeO_4$ and $HfGeO_4$ by different routes.

Oral presentation: Vuk Radmilović (Innovation Center, University of Belgrade, Faculty of Technology and Metallurgy, Belgrade, Serbia), Silver nanowire-based networks for transparent electrode applications.

Poster presentation: Alexandra Yu Ledneva (Nikolaev Institute of Inorganic Chemistry SB RAS, Novosibirsk, Russia), Tuning electronic properties of transition metal dichalcogenides by a heterovalent doping in metal sublattice; **Sanja Armaković** (University of Novi Sad, Department of Chemistry, Biochemistry and Environmental Protection, Faculty of Sciences, Novi Sad, Serbia), Photocatalytic degradation of the propranolol hydrochloride in natural water using titania-based nanoparticles.

2016

Oral presentation: Jin-Woo Oh (Department of Nanoenergy Engineering, Pusan National University, Busan, Republic of Korea), Virus based novel colorimetric sensor for cancer cell detection.

Poster presentation: Duygu Ağaoğulları (Department of Metallurgical and Materials Engineering, Istanbul Technical University, Maslak, Istanbul, Turkey), Characterization of graphite-encapsulated iron nanoparticles synthesized by milling-assisted low-pressure chemical vapor deposition; **Przemysław Kowalik** (Institute of Physics, Polish Academy of Sciences, Warsaw, Poland), Synthesis, characterization and biological application of opto-magnetic nanocomposites with up-converting properties based on NaYF₄&Fe₃O₄@SiO₂ nanoparticles; **Inga Narkevica** (Rudolfs Cimdins Riga Biomaterials Innovations and Development Centre of RTU, Institute of General Chemical Engineering, Faculty of Materials Science and Applied Chemistry, Riga Technical University, Riga, Latvia), Design and characterization of hydroxy-apatite/poly(vinyl alcohol) nanocomposite coated titania scaffolds for bone repair.

2017

PhD thesis: Vuk Radmilović (Innovation Center, Faculty of Technology and Metallurgy, University of Belgrade, Serbia), Transparent nanocomposite films for plastic electronics applications.

Oral presentation: Magdalena Radović (University of Belgrade, Vinča Institute of Nuclear Sciences, Laboratory for Radioisotopes, Belgrade, Serbia), Design and evaluation of biocompatible 90Y-labeled phosphate-coated MNPs for possible applications in cancer therapy; **Ilija Rašović** (Department of Materials, University of Oxford, UK), Hierarchical self-assembly of highly water-soluble fullerene derivatives.

Poster presentation: Petar Laušević (Laboratory of physical chemistry, Vinča Institute of Nuclear Sciences, University of Belgrade, Belgrade, Serbia), Influence of electrode thickness on the electrochemical properties of activated ion-track carbon supercapacitors; **Evgeny Y. Filatov** (Nikolaev Institute of Inorganic Chemistry of Siberian Branch of the Russian Academy of Sciences, Novosibirsk, Russia), One-step production of nanoalloys in Pt-Co, Pt-Fe, Pt-Ni systems; **Alexandra Correia** (Division of Pharmaceutical Chemistry and Technology, University of Helsinki, Finland), Towards a bio-nanoreactor by engineering inorganic nanoparticles with cancer cell membranes.

Oral presentation: Oi Lun Li (School of Materials Science and Engineering, Pusan National University, Korea), Solution plasma synthesized carbon-supported hybrid catalysts for energy converting systems; **Ekatarina D. Grayfer** (Nikolaev Institute of Inorganic Chemistry of the Siberian Branch of the Russian Academy of Sciences Novosibirsk, Russia), The use of layered nanomaterials in composites with metals and their compounds; **Sonja Jovanović** (Jožef Stefan Institute, Advanced Materials Department, Ljubljana, Slovenia, University of Belgrade, Vinča Institute of Nuclear Sciences, Belgrade, Serbia), Synthesis of antimicrobial cobalt ferrite/gold nanocomposites.

Poster presentation: Joanna Szymanska (Warsaw University of Technology, Faculty of Materials Science and Engineering, Warsaw, Poland), Determination of ceramic proppant impact on efficiency of shale gas production and the environment; **Željko Mravik** (University of Belgrade, Vinča Institute of Nuclear Sciences, Laboratory of Physics, Belgrade, Serbia), Study of the interaction between graphene oxide and 12-tungstophosphoric acid in their nanocomposite; **Chih Hsiang Fang** (Institute of Biomedical Engineering, College of Medicine and College of Engineering, National Taiwan University, Taipei, Taiwan), Hydroxyapatite/gelatin particles embedding stromal cell-derived factor-1 for bone tissue engineering.

2019

Oral presentation: Saide Umerova (Frantsevich Institute for Problems of Materials Science of NASU, Kiev, Ukraine), Screen-printed thin smooth nanostructured BaTiO₃ films for printed electronics.

Poster presentation: Sabina Horodecka (Institute of Macromolecular Chemistry, Czech Academy of Sciences, Praha, Czech Republic), Ultra fast volume responsive temperature and pH sensitive poly(N-isopropylacrylamide) hydrogels; **Alexander Bakulin** (Institute of Strength Physics and Materials Science, Russian Academy of Sciences, Tomsk, Russia), Influence of the impurity segregation on the adhesion properties of Al₂O₃/Ti₃Al interface; **Daniel Mijailović** (University of Belgrade, Innovation Center, Faculty of Technology and Metallurgy, Belgrade, Serbia), High-performance supercapacitors based on core-shell structured carbon fibers@spinel oxide composites.

The awards committees of the MRS-Serbia

1999	Nadežda Petranović, Milenko Plavšić, Milorad Davidović
2001-2008	Vera Dondur, Milenko Plavšić, Milorad Davidović
2009	Milenko Plavšić, Milorad Davidović, Slobodan Milonjić, Nenad Ignjatović 🗌
2010	Milenko Plavšić, Miodrag Zlatanović, Nenad Ignjatović
2011	Milorad Davidović, Nenad Ignjatović, Smilja Marković
2012-2015	Nenad Ignjatović, Smilja Marković, Željka Nikitović
2016	Nenad Ignjatović, Smilja Marković, Željka Nikitović, Đorđe Veljović
2017	Smilja Marković, Željka Nikitović, Đorđe Veljović, Bojana Obradović, Irena
	Nikolić
2018	Đorđe Veljović, Bojana Obradović, Veljko Đokić, Zoran Jovanović
2019	Bojana Obradović, Zoran Jovanović, Tatyana Demina (Russia), Vuk
	Uskoković (USA), Snežana Lazić (Spain)

Young researchers' conferences

Young Researchers' Conference (YRC) originated from the initiative by the MRS-Serbia, and since its inception it has been jointly organized by the MRS-Serbia and by the Institute of Technical Sciences (SASA), with the financial support from the Serbian Ministry for Education, Science and Technological Development. YRC was established by following the examples of EUROMAT-Junior and the IUMRS International Conference of Young Researchers (ICYRAM).

YRC was first held in 2002 and early on it was a national meeting for Serbian graduate students. From 2002, it has been held annually in Belgrade in the month of December. As of 2008, the meeting was transformed into a full conference and as of 2010, the conference started being international, with English as the official language.

YRC has traditionally gathered graduate - *i.e.* master and PhD - students, but also PhD graduates younger than 35. The main aim of the conference has been to enable young researchers working in the field of materials science and engineering to present an overview of their research through oral presentation, to meet their colleagues and exchange experiences about their research. Besides, for a lot of our young colleagues, YRC has given a unique opportunity to master their public presentation skills. It should be emphasized that the participation at the YRC is free-of-charge. All the conference participants receive the printed program and the Book of Abstracts, while the presented and peer-reviewed papers can be published in *Tehnika – Novi Materijali*. The best presented papers, as selected by the Session Chairpersons and the Awards Committee, are announced at the Closing Ceremony. The corresponding awards consisting of a diploma and a free-of-charge conference fee for the next YUCOMAT Conference are given to the awardees.



Number of accepted presentations at YRCs per year

As for the scientific content of the conference, we have given a full priority to research topics that are currently considered to be on the frontier of the field. Biomaterials, Catalysis, Electrochemistry, Environmental Science, Magnetic Materials, Metallurgy and Corrosion of Materials, Nanotechnology and Advanced Materials, Optical Materials, Polymer Science, Theoretical Modeling of Materials present some of these exciting topics that occupy the central stage at the YRCs.



Opening Ceremony of the YRC 2012

Participants have traditionally come from Eastern European countries including Serbia, Montenegro, Bosnia and Herzegovina, Croatia, Czech Republic, Hungary, Poland, Romania, Russia, Belarus, Ukraine, and Slovenia, but also from Western European countries and from countries from other continents, including Algeria, Austria, Belgium, Brazil, Canada, China, Germany, Italy, Kazakhstan, Spain, Taiwan, United Kingdom, United States, *etc*.

Scientific and organizing committee members of Young researchers conferences (YRC)

2002

President: Nenad Ignjatović

Members: Zorica Ajduković, Nikola Cvjetićanin, Miroslav Dramićanin, Đorđe Janaćković, Nebojša Romčević, Vladimir Srdić, Edin Suljovrujić

2003

Same as 2002, plus new members: Nebojša Mitrović and Kemal Delijić

2004

Same as 2003, plus new member: Nebojša Nikolić

2005-2006

Same as 2004

Same as 2006, plus new members: Jasmina Grbović Novaković and Marijana Petković

2008

Same as 2007, except Željka Nikitović in lieu of Marijana Petković

2009

Same as 2008, plus new member: Srečo Škapin

2010

Same as 2009, plus new members: Ralph Kraehnert and Vuk Uskoković

2011

Same as 2010, except Gordana Ćirić-Marjanović in lieu of Nebojša Romčević New members: Dragana Jugović, Smilja Marković, Bojana Obradović, Magdalena Stevanović and Marija Vukomanović

2012

President: Nenad Ignjatović

Vice-presidents: Dragana Jugović, Smilja Marković

Members: Zorica Ajduković, Nikola Cvjetićanin, Gordana Ćirić-Marjanović, Kemal Delijić, Miroslav Dramićanin, Jasmina Grbović Novaković, Đorđe Janaćković, Ralph Kraehnert, Nebojša Mitrović, Željka Nikitović, Nebojša Nikolić, Bojana Obradović, Srečo Škapin, Vladimir Srdić, Magdalena Stevanović, Edin Suljovrujić, Vuk Uskoković.

2013

Same as 2012, except Smilja Marković in lieu of Nenad Ignjatović (President)

Branka Hadžić, Irena Nikolić, Boban Stojanović, Ivana Štojković-Simatović, Đorđe Veljović, Siniša Vučenović and Dragana Živković in lieu of Nikola Cvjetićanin, Kemal Delijić, Miroslav Dramićanin and Đorđe Janaćković

2014

Same as 2013, except Rastko Vasilić in lieu of Nebojša Nikolić New members: Rafał Poręba and Katarina Vojisavljević

2015

Same as 2014, except Miodrag Lukić in lieu of Gordana Ćirić-Marjanović New member: Zoran Stojanović

Same as 2015, except Nadica Abazović, Jasmina Dostanić, Ivana Jevremović, Marija Milanović in lieu of Zorica Ajduković, Bojana Obradović, Vladimir Srdić and Edin Suljovrujić

2018

Same as 2017, except Sonja Jovanović, Lidija Mančić, Marko Opačić and Vuk Radmilović in lieu of Jasmina Grbović Novaković, Željka Nikitović and Zoran Stojanović

2019

Same as 2018

2020

President: Smilja Marković

Vice-presidents: Dragana Jugović, Magdalena Stevanović, Đorđe Veljović

Members: Tatiana Demina, Jasmina Dostanić, Xuesen Du, Branka Hadžić, Ivana Jevremović, Sonja Jovanović, Snežana Lazić, Miodrag Lukić, Lidija Mančić, Marija Milanović, Miloš Milović, Nebojša Mitrović, Irena Nikolić, Marko Opačić, Vuk Radmilović, Tanja Savić, Srečo Škapin, Boban Stojanović, Ivana Stojković-Simatović, Konrad Terpiłowski, Vuk Uskoković, Rastko Vasilić, Ljiljana Veselinović, Siniša Vučenović, Marija Vukomanović

Awarded presentations

2010

Ádám Detrich (Budapest University of Technology and Economics, Department of Physical Chemistry and Materials Science, Budapest, Hungary), Silica-silica and silica-titania combined coatings

Stevan Armaković (University of Novi Sad, Faculty of Sciences, Department of Physics, Novi Sad, Vojvodina, Serbia), The critical parameters of ultra-thin molecular film for monochromatic absorption

Miodrag Lukić (Institute of Technical Sciences of the Serbian Academy of Sciences and Arts, Belgrade, Serbia), The influence of powder characteristics on two-step sintering behavior of hydroxyapatite

2011

Milica Damjanović (Faculty of Technical Science, University of Novi Sad, Novi Sad, Serbia), ADI - an advanced engineering material

Jingjie Yeo (School of Mechanical and Aerospace Engineering, Nanyang Technological University, Singapore, Republic of Singapore), Investigating nanoporous silica aerogel obtained through negative pressure rupturing - A molecular dynamics study

Natalia A. Shurpo (Vavilov State Optical Institute, St.-Petersburg, Russia), Features of the nanostructured materials based on the quantum dots

Karol Lušpai (Center of Spectroelectrochemistry, Department of Electrochemistry and Conducting Polymers, Leibniz Institute for Solid State and Material Research, Dresden, Germany), ESR/UV-VIS-NIR spectroelectrochemical study of the charging the SWCNT/oligothiophene interphase

2012

Nenad Lazarević (Institute for Physics, Zemun, Serbia), Raman scattering study of iron-chalcogenide superconductors

Sanja Eraković, (Faculty of Technology and Metallurgy, University of Belgrade, Serbia), The bioactivity investigation of electrodeposited silver/hydroxyapatite/lignin coatings in simulated body fluid

Maria Čebela, (Vinča Institute for Nuclear Sciences, Belgrade, Serbia), Reducing the particle size of Bi_2O_3 and Fe_2O_3 for the synthesis of $BiFeO_3$

Nenad Filipović, (Institute of Technical Sciences of the Serbian Academy of Sciences and Arts, Belgrade, Serbia), Synthesis and characterization of selenium nanoparticles in the presence of bovine serum albumin or poly (I-glutamic acid) for biomedical application

2013

Jovana Zvicer (Faculty of Technology and Metallurgy, University of Belgrade, Belgrade, Serbia), Cytotoxicity of Ag/alginate nanocomposites: *in vitro* and *in vivo* studies

Marko V. Lubarda (Faculty of Polytechnics, Podgorica, Montenegro), Advanced computational methodologies for modeling realistic polycrystalline magnetic films and devices

Ivana Jevremović (Faculty of Technology and Metallurgy, University of Belgrade, Belgrade, Serbia), Use of quartz crystal microbalance (QCM) measurements to investigate novel top-of-the-line corrosion (TLC) mitigation method

Rafał Poręba (Institute of Macromolecular Chemistry AS CR, v.v.i., Heyrovskeho nam. Prague, Czech Republic), Preparation and characterization of waterborne polyurethane dispersions and films

Violeta Nikolić (Vinča Institute, University of Belgrade, Belgrade, Serbia), Spin glass like behaviour of magnetite nanoparticle system obtained by thermal decomposition of acetylacetonate precursor

2014

Tatiana S. Demina (Enikolopov Institute of Synthetic Polymer Materials, Russian Academy of Sciences, Moscow, Russia), Plasma surface modification of chitosan films to control biocompatibility

Giulia Rella (Institute of Biomaterials, Department of Materials Science and Engineering, University of Erlangen-Nuremberg, Erlangen, Germany), Fabrication and characterization of electrospun PCL/PHBHHx fibers

Mila Krstajić (Department of Electrochemistry, ICTM, University of Belgrade, Serbia), Formic acid electrooxidation on carbon supported platinum catalyst with preferential plane orientation

Bożena Sikora (Institute of Physics, PAS, al. Lotników, Warsaw, Poland), Multifunctional opto-magnetic nanoparticles for theranostic applications

Zoran Jovanović (Vinča Institute of Nuclear Sciences, University of Belgrade, Belgrade, Serbia), The deoxidation of silicon surface using strontium oxide deposited with the PLD technique

2016

Nejc Pavlin (National Institute of Chemistry, Ljubljana, Slovenia), Cellulose based separator for lithium – sulphur batteries

Aleksandar Miletić (University of Novi Sad, Faculty of technical sciences, Novi Sad, Serbia), Industrially prepared TiSiN nanocomposite coatings

2017

Jana Mišurović (University of Belgrade, Faculty of Physical Chemistry, Belgrade, Serbia), Synthesis and characterization of nanofibrous polyaniline

Željko Mravik (Vinča Institute of Nuclear Sciences, University of Belgrade, Belgrade, Serbia), Surface chemistry, thermal stability, and structural properties of graphene oxide/12-tungstophosphoric acid nanocomposite

Zohar A. Arnon (Department of Molecular Microbiology and Biotechnology, George S. Wise Faculty of Life Sciences, Tel Aviv University, Tel Aviv, Israel), Dynamic microfluidic control of supramolecular peptide self-assembly

2018

Nenad Filipović (Institute of Technical Sciences of the Serbian Academy of Sciences and Arts, Belgrade, Serbia), Biodegradable microparticles as a scaffold for cell therapy

Ali Erçin Ersundu (Faculty of Chemical and Metallurgical Engineering, Department of Metallurgical and Materials Engineering, Istanbul, Turkey), Tellurite glasses: potential transparent radiation shielding materials

Daniel Mijailović (University of Belgrade, Innovation Center, Faculty of Technology and Metallurgy, Belgrade, Serbia), Electrospun hybrids of carbon nanofibers with mixed metal oxide nanoparticles as high-performance battery-type supercapacitors

2019

Konrad Terpiłowski (Deartment of Interfacial Phenomena, Institute of Chemical Sciences, Faculty of Chemistry, Maria Curie-Skłodowska University in Lublin, Poland), The effect of biopolymer addition on the stability of the emulsion of essential oils

Jelena Rmuš (Vinča Institute for Nuclear Sciences, University of Belgrade, Belgrade, Serbia), Ion beam irradiated molybdenum disulfide for improved hydrogen evolution reaction

Tatjana Savić (Vinča Institute for Nuclear Sciences, University of Belgrade, Belgrade, Serbia), Mechanism of Rhodamine B photodegradation on hexagonal ZnIn₂S₄

Impressions of YUCOMAT participants



Ivan Božović Yale University, Upton, New York, USA

YUCOMAT has played an important role in my later life, for many years. On the personal side, it has been a recurring link with the country in which I was born, raised, and educated, and a chance to reunite with some old(er) friends. But I was equally drawn to attend just by the high level of the conference talks and speakers.

One should appreciate that the latter is, in fact, unexpected. Unfortunately, in most small countries the academic community tends to split into two factions. One is trying to open up, connect to the world, foster international collaboration, send students to specialize abroad, and impose international standards for awarding academic degrees, promotions and recognitions. The

other one erects border walls, promoting 'national' science, domestic journals, and closed conferences in local languages. While driven by preserving positions and privileges, such agenda is frequently justified ideologically and supported by local politicians. Not surprising, this has been happening also in countries that emerged after partitioning of the former Yugoslavia. It is within this background that one should appreciate the heroic role that has been played by the YUCOMAT leaders, Dragan Uskoković together with Slobodan Milonjić, Dejan Raković, and Mimo Radmilović. Starting from ground up and against all odds, they have grown YUCOMAT into one of the major scientific events in the region. It has featured world leaders in Materials Science such as Bob Sinclair, Ramamoorthy Ramesh, Darrell Schlom, Gordana Vunjak-Novaković, Laszlo Forro, Knut Urban, Eva Olsson and Laurence Marks, and many more prominent scientists from all parts of former Yugoslavia, eastern and western Europe, Asia, and America. To the numerous young scientists in attendance, this has been a window to the world, and a chance to connect with prospective mentors and collaborators. YUCOMAT is priceless and deserves unreserved support.



Yury Gogotsi Drexel University, Philadelphia, USA

Why is YUCOMAT worth of coming back? There are many reasons. The gorgeous location is certainly one of those. Located at the entrance to the Bay of Kotor and at the foot of Mount Orjen, Herceg Novi is a little tourist paradise. The town is small enough not to feel crowded, unlike many Mediterranean destinations. Cosi cafes and restaurants serve strong coffee and delicious food. Beaches and day trips to historic places around the Bay of Kotor make you feel being on vacation. There is plenty to see in that area and I've seen just enough to make me want to come back. And one can visit Dubrovnik on the way to or from Herceg Novi, or maybe before and after the conference, and you'll still want to come back again. Maybe I'll rent a car and just drive around next time to see more of this paradise. However, don't forget, you come for a conference, not just sightseeing, swimming in the warm Mediterranean water early in the morning when everyone else is sleeping or jogging along the beach. You come to meet old friends and colleagues (I've known some of them for longer than 30 years). You come to meet their children who are already working in the same field. I met the mother of one of our Drexel PhD students there. And of course, I met many European and US scientists whom I've not had a chance to meet before. There is a Gordon conference feeling when one can share meals and drinks with many other conference is not focused narrowly on one specific subject, it covers a very wide range of materials and I was able to broaden my horizon. One can meet many scientists from Eastern and Central Europe who rarely visit conferences in the US, including scientists from Ukraine, the country where I was born and raised. And make new friends, of course. I look forward to YUCOMAT 2020!



Natalia V. Kamanina Vavilov State Optical Institute, St.Petersburg, Russia

Among different conferences, seminars, congress, workshops, etc. YUCOMAT, the Conference of the Materials Research Society of Serbia, takes up the special place. This type of the scientific event includes the brilliant speeches of the plenary and invited scientists, good discussions, and joint meetings of the researchers from different country in the world. I was presented with many innovative ideas, and at the same time, enjoyed the warm atmosphere and the nice conversation after the scientific sessions. The exchange of opinions in the scientific field and in the lives of individuals creates mutual understanding between specialists from different parts of the World. This creates a

positive effect on the scientific environment around the world, and you can't experience it in any other place. Participation in such a conference not only expands our knowledge in the field of materials science, but also creates a positive mood for the development of science in the world as a whole. As my personal opinion, it is beautiful conference and I like YUCOMAT community very much! It is my pleasure to congratulate the YUCOMAT organizers this 25th anniversary!



Philippe Colomban Sorbonne Université, Paris, France

Having had as one of the supervisors of my doctorate Alexandre (Sasha) Novak, collaborator of Dušan Hadži (NIC, Ljubljana), I quickly associated with many Yugoslav spectroscopists in the study of the proton conductors, chronologically first Robert Blinc (> 1985, Ljubljana), then Ubavka Mioč (Belgrade) for many years, as well as Milorad Davidović and Nikola Tjapkin (Vinča), and their colleagues in the study of conductivity in a wide range of frequencies, up to GHz. The collaboration continued with Boris Orel and his team (Urska Lurencic-Stangar, Angela Surca-Vuk, and colleagues) at NIC (National Institute of Chemistry, Ljubljana, Slovenia), on

composites and hybrid materials with proton and electrochromic conduction. My cooperation continued with Belgrade team in particular for the first Raman "in operando" studies of electrochromic devices, and on Keggins' salts with Snežana M. Uskoković, Aleksandar Kremenović and Ubavka Mioč. From 2004 collaboration focused on the study of cultural heritage with Ubavka Mioč on Neolithic Vinča pottery, with Bilge Minceva-Sukarova, Oridje Grupce, *etc.* (University of Skopje) on Byzantine pottery

and with Aleksandar Kremenović, Vesna Matović and Suzana Erić on the conservation of historic buildings (Kalemegdan, Monasteries) and paintings (Lazar Vozarević). With Aleksandar Kremenović and Bratislav Antić and several students, the work also focused on nanomaterials. A significant part of his work was presented at meetings YUCOMAT 2003 and 2006. My last visit to Herceg Novi was for YUCOMAT 2015 - The 20th Anniversary YUCOMAT Conference. YUCOMAT conference has grown and become a sought-after event for the quality of the presentations and exchanges between participants.



Peter Franz Rogl University of Vienna, Austria

The revival of the legendary "Sintering Conferences in former Yugoslavia" in the new form of YUCOMAT, a modern International Materials Science Congress, since 1997 annually held in Herceg Novi, Montenegro was a masterpiece of its Director Prof. Dr. Dragan Uskoković, president of the Materials Research Society of Serbia and the International Institute for the Science of Sintering. It is not only the charming Mediterranean ambient, that attracts ever since a few hundred scientists from all over the world each year to attend a widespread scientific materials research program at YUCOMAT. Over years friendships have been catalyzed among participants and YUCOMAT has

become a forum not only to meet, but YUCOMAT's interdisciplinary society with wellpresented plenary invites in relaxed atmosphere to absorb science of remote fields, which one always wanted to study but never had time to dive into and to freely discuss with experts. As older scientists we appreciate YUCOMAT as a starting point for young coworkers not only to increase their knowledge but to acquire confidence in presenting their research in a friendly atmosphere. Although there is a continuous influx and out flux of participants the core of YUCOMAT has become a scientific family, a melting pot of ideas from which I always could take some inspiration home.



Mamoru Senna Keio University, Yokohama, Japan

Centered, but not peaked, at the joint event 12. YUCOMAT with INCOME in 2010 in Herceg Novi, INCOME conference used to be, and is, one of the core driving forces of my scientific activity for well more than a decade. Each time I was surprised by the variety of the program with cutting edge level talks. Maintenance of such outstanding scientific level is doubtlessly attributed to the tireless and enthusiastic efforts of Prof. Dragan Uskoković, together with many supporters in- and outside of the Serbian Academy of Sciences and Arts. Everywhere in any scientific events, organizers are always paying their particular efforts to attract interests not only of the experts in the closely related fields, but also of younger generation in broader fields and

genres, their fresh eyes wide opened. This is exactly the case for YUCOMAT. In the era of restless paradigm shift in our society, nothing if more important to flexibly learn from exotic fields, instead of extending established professional line of thinking. Indeed, new idea, inspired by serendipity and leading to a bid game-change, is in most cases crystallized by free and friendly conversation, with a coffee cup in hand and enjoying a nice Boka Bay view under a blue sky. This is perfectly realized by YUCOMAT.



Richard W. Siegel Rensselaer Polytechnic Institute, Troy, New York, USA

In late 2009, I received an invitation from Prof. Dragan Uskoković to present a talk at YUCOMAT 2010 the following September in Herceg Novi. I was very pleased to accept. It began for me a wonderful series of conference experiences over the past ten years unlike most that I have found during my long scientific career. I have also been privileged to serve on its International Advisory Board since 2010. The YUCOMAT series, begun 25 years ago, had by its 12th Annual Meeting in 2010 already become a scientific gem set in one of the world's loveliest surroundings in Europe backed by the rising mountains of Montenegro along the beautiful shores of the Adriatic's Bay of Kotor. These stimulating conferences have succeeded in bringing together in this very special setting international world-class scientists, others in

various stages of developing their careers, and university students and researchers all eager to hear about a broad variety of the latest progress in the materials sciences. The essential fabric of these conferences has been woven from their outstanding lectures, followed by searching questions and discussions, enlightened poster sessions, and active social events ranging from the spectacular opening cocktail reception to the closing speakers' dinner and boat trip to the world-heritage site of Kotor. YUCOMAT in Herceg Novi was, and remains, a stimulating and relaxing venue for very productive interactions among all these groups. Many old friendships have been warmly revisited at these conferences and new friendships have blossomed. Hearty congratulations to Prof. Uskoković and the other organizers on their exceptional foresight, creativity, and hard work in guiding YUCOMAT through its very successful 25 years. All of us who have participated in these meetings are especially fortunate to have been a part of this history and wish them a long and fruitful future.



Robert Sinclair Stanford University, California, USA

I was first invited to Yucomat by Mimo in the early 2000's and felt immediately welcomed and "at home". I have tried to come back every year since then, only missing once or twice because of prior commitments. What makes this conference so special for me are the people that I meet (both old and new friends), the opportunity to hear high quality presentations from fields and from countries I would not normally encounter, and of course the wonderful location, setting and hospitality. I have immense respect for the origins of this event, as a means to keep together the local materials science community in difficult times. I believe that this philosophy and spirit has become the dominant

underlying theme that fosters a unique interaction and mutual understanding between both regular participants and newly-minted attendees alike. The embodiment of this philosophy comes from the organizing scientists and administrators, whom we have all come to know so well, who have dedicated their invaluable time and effort to ensure that there is a new Yucomat each year. From the moment of arrival, we experience an extremely warm welcome, expertly run talks and poster sessions, to wonderful social events and intermingling. This meeting has truly become a significant part of my life. I offer my strongest congratulations to Dragan and all his team, past and present, on the 25th anniversary of the first meeting in 1995, and I look forward with anticipation to many more in the future.



Gordana Vunjak-Novaković Columbia University, New York NY, USA

Looking at this year's program of the YUCOMAT conference, I am overwhelmed with wonderful memories from the previous meetings, both from our scientific discussions and from the unforgettable social agenda. It is rare to see, among many prestigious meetings around the world, such a combination of exceptionally strong scientific program, a wonderful venue at the Mediterranean coast, and incredible hospitality of the organizers. I truly enjoyed being a part of YUCOMAT. I was invited to speak at these meetings in 2014 and 2016, and I sincerely hope to come again. In 2014, I talked about the design of "cell-instructive" materials for engineering human tissues, towards application in regenerative medicine and modeling of diseases. In 2016, I spoke about the use of biomaterials and adult human stem cells for directed tissue regeneration. That year, I was also honored by the

award for Lasting and Outstanding Contribution to Material Science and Engineering. After three decades of professional work at universities in the U.S.A., the recognitions that come from home are the most important ones and those we love the most. I remain grateful for this honor.

It is remarkable that the YUCOMAT meeting has maintained the continuity of scientific excellence, attracting the mix of current and rising stars in our field and young investigators. The quality of speakers and the scientific program seem to further increase, year after year. This meeting is becoming a regular event for some of the top materials scientists, and a place to go for discussing advances in our field. I would like to congratulate the organizers on these admirable accomplishments.

WEB contents

YUCOMAT books of abstracts

YUCOMAT 1995	https://www.mrs-serbia.org.rs/index.php/yucomat-books-of-
	<u>abstracts/adva-mat-1995</u>
YUCOMAT 1997	https://www.mrs-serbia.org.rs/index.php/yucomat-books-of-
	<u>abstracts/yucomat-1997</u>
YUCOMAT 1999	https://www.mrs-serbia.org.rs/index.php/yucomat-books-of-
	<u>abstracts/yucomat-1999</u>
YUCOMAT 2001	https://www.mrs-serbia.org.rs/index.php/yucomat-books-of-
	<u>abstracts/yucomat-2001</u>
YUCOMAT 2003	https://www.mrs-serbia.org.rs/index.php/yucomat-books-of-
	<u>abstracts/yucomat-2003</u>
YUCOMAT 2004	https://www.mrs-serbia.org.rs/index.php/yucomat-books-of-
	<u>abstracts/yucomat-2004</u>
YUCOMAT 2005	https://www.mrs-serbia.org.rs/index.php/yucomat-books-of-
	<u>abstracts/yucomat-2005</u>
YUCOMAT 2006	https://www.mrs-serbia.org.rs/index.php/y2006/y2006b
YUCOMAT 2007	https://www.mrs-serbia.org.rs/index.php/y2007/y2007b
YUCOMAT 2008	https://www.mrs-serbia.org.rs/index.php/y2008/y2008b
YUCOMAT 2009	https://www.mrs-serbia.org.rs/index.php/y2009/y2009b
YUCOMAT 2010	https://www.mrs-serbia.org.rs/index.php/y2010/y2010b
YUCOMAT 2011	https://www.mrs-serbia.org.rs/index.php/yucomat-2011/y2011b
YUCOMAT 2012	https://www.mrs-serbia.org.rs/index.php/yucomat-2012/y2012b
YUCOMAT 2013	https://www.mrs-serbia.org.rs/index.php/yucomat-2013/y2013b
YUCOMAT 2014	https://www.mrs-serbia.org.rs/index.php/yucomat-2014/y2014b
YUCOMAT 2015	https://www.mrs-serbia.org.rs/index.php/yucomat-2015-a/y-2015-book
YUCOMAT 2016	https://www.mrs-serbia.org.rs/index.php/yucomat-2016/yucomat-2016-
	book-of-abstracts
YUCOMAT 2017	https://www.mrs-serbia.org.rs/index.php/yucomat-2017/yucomat-book-
	<u>of-abstracts</u>
YUCOMAT 2018	https://www.mrs-serbia.org.rs/index.php/yucomat-2018/announcement
YUCOMAT 2019	https://www.mrs-serbia.org.rs/index.php/yucomat-wrtcs-2019/book-of-
	<u>abstracts</u>

YRC books of abstracts

YRC 2002	https://dais.sanu.ac.rs/handle/123456789/120
YRC 2003	https://dais.sanu.ac.rs/handle/123456789/119
YRC 2004	https://dais.sanu.ac.rs/handle/123456789/118
YRC 2005	https://dais.sanu.ac.rs/handle/123456789/117
YRC 2006	https://dais.sanu.ac.rs/handle/123456789/116
YRC 2007	https://dais.sanu.ac.rs/handle/123456789/111
YRC 2008	https://dais.sanu.ac.rs/handle/123456789/110
YRC 2009	https://dais.sanu.ac.rs/handle/123456789/109
YRC 2010	https://dais.sanu.ac.rs/handle/123456789/102
YRC 2011	https://www.mrs-serbia.org.rs/index.php/10-yrc-2011/10yrc2011
YRC 2012	https://www.mrs-serbia.org.rs/index.php/11-yrc-2012/11yrc2012
YRC 2013	https://www.mrs-serbia.org.rs/index.php/12-yrc-2013/yrc-2013
YRC 2014	https://www.mrs-serbia.org.rs/index.php/yrc-books-of-abstracts/13th-young-
	researchers-conference
YRC 2015	https://www.mrs-serbia.org.rs/index.php/14yrc-2015/14yrc-book-of-abstracts
YRC 2016	https://www.mrs-serbia.org.rs/index.php/15-yrc-2016/book-of-abstracts-15yrc
YRC 2017	https://www.mrs-serbia.org.rs/index.php/16-yrc-2017/yrc-book-2017
YRC 2018	https://www.mrs-serbia.org.rs/index.php/17-yrc-2018/yrc-book-2018
YRC 2019	https://www.mrs-serbia.org.rs/index.php/18-yrc-2019/yrc-book-2019

YUCOMAT conference proceedings

The First YUCOMAT 1995, September 18-22, Herceg Novi, Montenegro Advanced Materials for High Technology Applications *Materials Science Forum* **Vol. 214** (1996) 1-272 <u>https://www.scientific.net/book/advanced-materials-for-high-technology-applications/978-3-0357-0507-2</u>

The Second YUCOMAT 1997, September 15-19, Herceg Novi, Montenegro Advanced Materials and Processes *Materials Science Forum* **Vols. 282-283** (1998) 1-354 <u>https://www.scientific.net/MSF.282-283</u>

The Third YUCOMAT 1999, September 20-24, Herceg Novi, Montenegro Trends in Advanced Materials and Processes *Materials Science Forum* Vol.352 (2000) 1-282 <u>https://main.scientific.net/book/trends-in-advanced-materials-and-processes/978-3-0357-0554-6/ebook</u>

The Forth YUCOMAT 2001, September 10-14, Herceg Novi, Montenegro Contemporary Studies in Advanced Materials and Processes *Materials Science Forum* **Vol. 413** (2003) 1-274 <u>https://main.scientific.net/book/contemporary-studies-in-advanced-materials-and-processes/978-3-0357-0575-1/ebook</u> The Fifth YUCOMAT 2003, September 15-19, Herceg Novi, Montenegro Progress in Advanced Materials and Processes *Materials Science Forum* **Vols. 453-454** (2004) 1-571 <u>https://main.scientific.net/book/progress-in-advanced-materials-and-processes/978-3-0357-0626-0/ebook</u>

The Sixth YUCOMAT 2004, September 13-17, Herceg Novi, Montenegro Current Research in Advanced Materials and Processes *Materials Science Forum* Vol.494 (2005) 1-566 <u>https://main.scientific.net/book/current-research-in-advanced-materials-and-processes/978-3-03813-009-3/ebook</u>

The Seventh YUCOMAT 2005, September 12-16, Herceg Novi, Montenegro Recent Developments in Advanced Materials and Processes *Materials Science Forum* **Vol. 518** (2006) 1-570 <u>https://main.scientific.net/book/recent-developments-in-advanced-materials-and-processes/978-3-03813-046-8/ebook</u>

The Eighth YUCOMAT 2006, September 4-8, Herceg Novi, Montenegro Research Trends in Contemporary Materials Science *Materials Science Forum* **Vol. 555** (2007) 1-576 <u>https://main.scientific.net/book/research-trends-in-contemporary-materialsscience/978-3-03813-115-1/ebook</u>

The Ninth YUCOMAT 2007, 10–14 September 2007, Herceg Novi, Montenegro Selected Papers Materials and Manufacturing Processes Vol. 23(6) (2008) 547-623 https://www.tandfonline.com/toc/Immp20/23/6?nav=tocList

The Ninth YUCOMAT 2007, 10–14 September 2007, Herceg Novi, Montenegro Selected Papers *Surface Engineering* Vol. 24(4) (2008) 247-275 https://www.tandfonline.com/toc/ysue20/24/4?nav=tocList

The Tenth YUCOMAT 2008, 8-12 September 2008, Herceg Novi, Montenegro Selected Papers *Surface Engineering* Vol. 24(10&11) (2009) 1051-1228 https://www.tandfonline.com/toc/lmmp20/24/10-11?nav=tocList

The Tenth YUCOMAT 2008, 8-12 September 2008, Herceg Novi, Montenegro Selected Papers *Acta Physica Polonica A* Vol. **115(4)** (2009) 759-846 <u>http://przyrbwn.icm.edu.pl/APP/SPIS/a115-4.html</u>

The Eleventh YUCOMAT 2009, August 31 – September 4 2009, Herceg Novi Selected Papers *Acta Physica Polonica A* Vol. 117)5) (2010) 721-884 http://przyrbwn.icm.edu.pl/APP/SPIS/a117-5.html The Eleventh YUCOMAT 2009, August 31 – September 4 2009, Herceg Novi Selected Papers International Journal of Modern Physics B Vol. 24(6&7) (2010) 655-834. https://www.worldscientific.com/toc/ijmpb/24/06n07

The Twelfth YUCOMAT 2010, September 6–10, Herceg Novi, Montenegro Selected Papers Acta Physica Polonica A Vol. **120(2)** (2011) 209-348 http://przyrbwn.icm.edu.pl/APP/SPIS/a120-2.html



