

# TABLE OF CONTENTS

<b>Part I Conference Schedule.....</b>	<b>1</b>
<b>Part II Keynote Speeches .....</b>	<b>5</b>
Keynote Speech 1: 2-D Nanostructures for Sensor Application .....	5
Keynote Speech 2: Synergistic Effect of Thermodynamics and Kinetics of Phase Transformation in Nonequilibrium Metallic Materials and Its Applications.....	6
Keynote Speech 3: Solving Corrosion Problems on Coal-to-Chemical Gasification Systems and Waste-to-Energy Boilers .....	7
Keynote Speech 4: Superheating Property of REBa <sub>2</sub> Cu <sub>3</sub> O <sub>7-x</sub> Thin Film and Its Applications in the Growth of REBa <sub>2</sub> Cu <sub>3</sub> O <sub>7-x</sub> Superconductors .....	8
Keynote Speech 5: Comprehensive Strength Optimization of Spacecraft and Orbital Station Components: Outlook of Ukrainian State-of-the-Art and Off-Shelf Designs.....	9
Keynote Speech 6: Development of Cast High Performance Aluminum Alloy Used in Advanced Diesel Engine .....	10
<b>Part III Oral Presentations .....</b>	<b>11</b>
Oral Session 1: Advanced Material Technologies .....	12
Oral Session 2: Energy Materials and Semiconductors .....	13
Oral Session 3: Mechanics and Mechanical Technologies .....	14
Oral Session 4: Nanomaterials .....	15
Oral Session 5: Surface and Coatings Technology .....	16
Oral Session 6A: Characterization and Testing .....	17
Oral Session 6B: Characterization and Testing.....	18
Oral Session 7: Structural Materials.....	19
<b>Part IV Poster Presentations.....</b>	<b>20</b>
<b>Part V How to Get to Shaanxi Hua Fu Gong Hotel.....</b>	<b>24</b>

# Part I Conference Schedule

**Thursday, Nov. 1, 2018**

Time	Activity	Location
08:30-19:30	Registration	Lobby of Hua Fu Gong Hotel

Notes: Please inform us your Paper ID when you register.

**Friday Morning, Nov. 2, 2018**

Time	Activities	Location: Lecture Hall, Teaching Building 3, XATU*
08:10	Gathering at the lobby of Hua Fu Gong Hotel and taking bus to Lecture Hall, XATU	
08:30-08:50	Opening Ceremony (Chaired by Prof. Hongwei Zhou, XATU) Welcoming Speeches: Prof. Yaping Lei, Conference Chair, President of XATU Pose for a Group Photo	
08:50-09:25	Keynote Speech 1: 2-D Nanostructures for Sensor Applications Speaker: Prof. Sigitas Tamulevičius, Kaunas University of Technology, Lithuania	
09:25-10:00	Keynote Speech 2: Synergistic Effect of Thermodynamics and Kinetics of Phase Transformation in Nonequilibrium Metallic Materials and Its Applications Speaker: Prof. Feng Liu, Northwestern Polytechnical University, China	
10:00-10:35	Keynote Speech 3: Solving Corrosion Problems on Coal-to-Chemical Gasification Systems and Waste-to-Energy Boilers Speaker: Dr. William M. Cox, Corrosion Management Limited, UK	
10:35-10:50	Coffee Break	
10:50-11:25	Keynote Speech 4: Superheating Property of $\text{REBa}_2\text{Cu}_3\text{O}_{7-x}$ Thin Film and Its Applications in the Growth of $\text{REBa}_2\text{Cu}_3\text{O}_{7-x}$ Superconductors Speaker: Prof. Xin Yao, Shanghai Jiao Tong University, China	
11:25-12:00	Keynote Speech 5: Comprehensive Strength Optimization of Spacecraft and Orbital station Components: Outlook of Ukrainian State-of-the-Art and Off-Shelf Designs Speaker: Dr. Alexander Khotsianovsky, Pisarenko Institute of Problems of Strength of the National Academy of Sciences of Ukraine, Ukraine	
12:00-12:35	Keynote Speech 6: Development of Cast High Performance Aluminium Alloy Used in Advanced Diesel Engine Speaker: Prof. Jianping Li, Xi'an Technological University, China	
12:35	Gathering at the Lecture Hall of XATU, and taking bus to Hua Fu Gong Hotel	

\* Xi'an Technological University

### Friday Afternoon, Nov. 2, 2018

Time	Activity	Location: Hua Fu Gong Hotel
12:45-13:30	Buffet Lunch	2F, Western Restaurant
14:00-18:20	Oral Session 1: Advanced Material Technologies	3F, Conference Room 1
	Oral Session 2: Energy Materials and Semiconductors	3F, Conference Room 2
	Oral Session 3: Mechanics & Mechanical Technologies	3F, Conference Room 3
18:20-19:30	Buffet Dinner	2F, Western Restaurant

### Saturday, Nov. 3, 2018

Time	Activity	Location: Hua Fu Gong Hotel
08:30-12:35	Oral Session 4: Nanomaterials	3F, Conference Room 1
	Oral Session 5: Surface and Coatings Technology	3F, Conference Room 2
	Oral Session 6A: Characterization and Testing	3F, Conference Room 3
12:35-13:30	Buffet Lunch	2F, Western Restaurant
14:00-17:10	Oral Session 6B: Characterization and Testing	3F, Conference Room 2
	Oral Session 7: Structural Materials	3F, Conference Room 3
17:20-18:00	Poster Presentations: Part A	3F, Conference Room 2
	Poster Presentations: Part B	3F, Conference Room 3
18:00-20:00	Closing Ceremony Closing Speech Best Oral Award Welcome Banquet	1F, Banquet Hall

### Sunday, Nov. 4, 2018

Time	Field Visit
08:00	Gathering at the lobby hall of Hua Fu Gong Hotel
08:30-17:30	Shaanxi History Museum
	Lunch
	Terracotta Army

Notes: Please show your Visit Ticket when getting on the bus.

## 大会日程安排中文版(Conference Schedule - Chinese Vision)

11月1日，星期四

时间	日程安排	地点
08:30-19:30	注册报到	华浮宫酒店 1 楼大厅

11月2日，星期五上午

时间	日程安排	地点:西安工业大学教3楼学术报告厅
08:10	华浮宫酒店一楼大厅集合乘校车前往西安工业大学学术报告厅	
08:30-08:50	开幕式 (主持人: 周宏伟教授, 西安工业大学) 开幕致辞: 雷亚萍教授, 大会主席, 西安工业大学校长 大会参会代表集体合影	
08:50-09:25	主题报告 1: 2-D Nanostructures for Sensor Applications 报告专家: Sigita Tamulevičius 教授, 考纳斯科技大学, 立陶宛	
09:25-10:00	主题报告 2: Synergistic Effect of Thermodynamics and Kinetics of Phase Transformation in Nonequilibrium Metallic Materials and Its Applications 报告专家: 刘峰教授, 长江学者, 西北工业大学, 中国	
10:00-10:35	主题报告 3: Solving Corrosion Problems on Coal-to-Chemical Gasification Systems and Waste-to-Energy Boilers 报告专家: William M. Cox 博士, 首席顾问, 腐蚀管理有限公司, 英国	
10:35-10:50	茶歇	
10:50-11:25	主题报告 4: Superheating Property of REBa <sub>2</sub> Cu <sub>3</sub> O <sub>7-x</sub> Thin Film and Its Applications in the Growth of REBa <sub>2</sub> Cu <sub>3</sub> O <sub>7-x</sub> Superconductors 报告专家: 姚忻教授, 长江学者, 上海交通大学, 中国	
11:25-12:00	主题报告 5: Comprehensive Strength Optimization of Spacecraft and Orbital Station Components: Outlook of Ukrainian State-of-the-Art and Off-Shelf Designs 报告专家: Alexander Khotsianovsky 高级研究员, 乌克兰国家科学院 Pisarenko 强度问题研究所, 乌克兰	
12:00-12:35	主题报告 6: Development of Cast High Performance Aluminium Alloy Used in Advanced Diesel Engine 报告专家: 李建平教授, 西安工业大学, 中国	
12:35	西安工业大学学术报告厅集合乘校车前往华浮宫酒店	

11月2日，星期五下午

时间	日程安排	地点：华浮宫酒店
12:45-13:30	自助午餐	2楼西餐厅
14:00-18:20	口头报告 1: 先进材料技术	3楼1号会议室
	口头报告 2: 能源材料和半导体	3楼2号会议室
	口头报告 3: 力学和机械技术	3楼3号会议室
18:20-19:30	自助晚餐	2楼西餐厅

11月3日，星期六

时间	日程安排	地点：华浮宫酒店
08:30-12:35	口头报告 4: 纳米技术	3楼1号会议室
	口头报告 5: 表面涂层技术	3楼2号会议室
	口头报告 6A: 表征和测试	3楼3号会议室
12:35-13:30	自助午餐	2楼西餐厅
14:00-17:10	口头报告 6B: 表征和测试	3楼2号会议室
	口头报告 7: 结构材料	3楼3号会议室
17:20-18:00	张贴报告 A	3楼2号会议室
	张贴报告 B	3楼3号会议室
18:00-20:00	闭幕式 闭幕致辞 最佳口头报告颁奖 晚宴	1楼宴会厅

11月4日，星期日

时间	文化遗址实地考察	
08:00	华浮宫酒店一楼大厅集合	
08:30-17:00	陕西历史博物馆	
	午餐	
	秦始皇兵马俑	
	返回华浮宫酒店	

温馨提示：请务必带上您的实地考察券。

# Part II Keynote Speeches

## Keynote Speech 1: 2-D Nanostructures for Sensor Application

**Speaker: Prof. Sigitas Tamulevičius, Member of the European Materials Research Society, Professor of the Physics Department, Kaunas University of Technology (KTU), Republic of Lithuania.**



**Biography:** Prof. Dr. Habil. Sigitas Tamulevičius, obtained his Physics Engineer degree from the Moscow Engineering Institute in Physics (Moscow, former USSR) in 1979, a Ph.D. degree from the University of Vilnius (Lithuania) in 1984, Doctor Habilitus degree from Kaunas University of Technology (1994). From 1990 to 1991, he was a postdoc at Royal Institute of Technology (Stockholm, Sweden). In 1994 he was Research Scholar, Fulbright Scholarship, Department of Physics, Massachusetts Institute of Technology (USA). Since 1996 he is full professor at the Physics Department and Research director of the Institute of Materials Science of Kaunas University of Technology (Lithuania). He has co-founded spin-off company producing optical security means, co-authored approx. 220 peer reviewed publications indexed in Web of Science (WS) in the field of vacuum and plasma technologies and optical microstructures with more than 1200 citations (h-index: 18), and is (co-) author of approx. 15 textbooks on different aspects of Materials Science. From 2002 he was Member expert and from 2010 he is full Member of Lithuanian Academy of Sciences. Prof. Tamulevičius has received series of awards including Soros Foundation Research Grant, (1993) (Awarded by American Physical Society), Fulbright certificate (1997), National Award for Science (2000), Recognition letter by the President of EMRS (2010), Kaunas city Best scientist award (2017). He was awarded Adjunct professor in Materials Science at Southern Denmark University (2016). He is Editor in Chief of Scientific Journal “Materials Science (Medžiagotyra)” (WS, Clarivate Analytics), Member of Editorial Board of “Materials Research express” (IOPScience). He was a national representative in FP7 NMP programme. He headed multiple research projects funded by European Framework Program, COST, Eureka, NordForsk, Lithuanian State Foundation for Research and Studies, the Research Council, as well as Science and Innovation Agency of Lithuania.

**Abstract.** Two types of ordered nanoparticle systems (linearly arranged nanoparticles in 1- D periodic structures either 2-D nanometer structures of nanoparticles) as potential building blocks for optical sensors or catalytic applications will be presented exploring both top-down and bottom-up approaches. In the top - down approach, reactive magnetron sputtering (high-power impulse magnetron sputtering mode-HIPIMS) of silver target was used to deposit thin films of diamond like carbon (DLC) nanocomposites including silver nanoparticles. Analysis of optical and electrical properties of thin DLC based silver nanocomposites (DLC:Ag) as well as effects of thermal treatment will be shortly presented. Structuring features of the nanocomposites using reactive ion sputtering combined with nanoimprint lithography or femtosecond laser irradiation was used to produce 1-D or 2-D submicron structures of DLC:Ag. Influence of plasma parameters applied during reactive ion etching as well as role of laser beam parameters like fluence, polarization were studied systematically paying attention to the evolution of 2-D system of nanoparticles.

Alternatively (bottom--up approach), 2-D submicron system of silver nanoparticles was produced applying capillary assisted particle assembly (CAPA) method. Response of colloidal solution of silver nanocubes with edge dimensions ranging from few to tenth nanometers were studied applying pump-probe spectroscopy and UV-Vis spectroscopy. Applying different types of templates produced by holographic lithography either e-beam lithography, 2-D systems of silver nanocubes was produced employing an original CAPA setup. Role of different solvents, humidity and substrate temperature were studied to produce highly ordered 2-D nanometer structures. Pump probe spectroscopy experiments indicate that such kind of nanostructures potentially ensure highly beneficial conditions for catalytic applications.

## **Keynote Speech 2: Synergistic Effect of Thermodynamics and Kinetics of Phase Transformation in Nonequilibrium Metallic Materials and Its Applications**

**Speaker: Prof. Feng Liu, Distinguished Professor of Yangtze River Scholar, Ministry of Education of China, School of Materials Science and Engineering, Northwestern Polytechnical University, China.**



**Biography:** Prof. Feng Liu is currently in charge of the group of rapid solidification and preparation of metastable materials of State Key Laboratory of Solidification Processing, Northwestern Polytechnical University, China. He has been awarded as Yangzi River Scholar Distinguished Professor (2012), Distinguished Young Scholar (2011), and Ten-Thousand Leading Talent (2016)

**Abstract.** By phase transformation, hot processing decides structure and property of metallic materials. With developing the hot processing technology, an originally independency between thermodynamics and kinetics controlling the phase transformation is replaced by a currently strong thermo-kinetic correlation. Traditional theories basing on the independency cannot deal with processes basing on the correlation. This key problem brings a big challenge and a precious opportunity for non-equilibrium phase transformation. Hence we proposed a philosophy of thermo-kinetic synergistic effect, built up a series of theories, new regulations and mechanisms for complex systems, and made a breakthrough in key technologies.

## Keynote Speech 3: Solving Corrosion Problems on Coal-to-Chemical Gasification Systems and Waste-to-Energy Boilers

**Speaker: Dr. William M. Cox, Director and Principal Consultant, Corrosion Management Limited, UK.**



**Biography:** William Cox is Director and Principal Consultant at Corrosion Management Limited, and is based in Rugby, UK. Dr. Cox has a BSc in Metallurgy from the University of Aston in Birmingham, and an MSc and PhD in Corrosion from the University of Manchester Institute of Science and Technology.

During the early part of his career, Dr. Cox was involved in the Steel industry with the Weir Group, and then in Diamond mining and Copper extraction with Anglo American Corporation. He joined the Corrosion and Protection Centre Industrial Services (CAPCIS), UMIST (University of Manchester) in 1981 and was Director of Operations and then Managing Director of Capcis March Ltd., one of the first UMIST Venture companies, which was launched to develop and exploit advanced on-line corrosion sensing technologies.

He founded Corrosion Management Ltd in 1994 and for more than twenty years he has specialized in the application of advanced corrosion monitoring and then Risk Based Inspection and Risk Based Maintenance technologies in the process industries.

His specialist area is the application of advanced on-line corrosion surveillance instrumentation in Power Generation, Oil and Gas Production, Refining, Petrochemical and Chemical Processing, Nuclear, Aerospace and Civil Engineering industries. Other activities include Failure Investigation and Litigation work.

Corrosion Management has project activities in Europe, North America and Pacific East Asia.

- Dr. Cox is a Fellow of the UK Institute of Corrosion and has been a Professional Member since 1980. He is a Member of Council and was a Founder Member of the ICorr Training and Certification Governing Board, on which he served from 1998 to 2018. He was President of the Institute of Corrosion from 1996 to 1998.
- He is a NACE Fellow and has been a Member of NACE since 1981. He served as Chairman of the NACE International Relations Strategy Operations Committee from 2001 to 2005.
- He is a Fellow of the UK Institute of Materials, Minerals and Mining, and served as a Member of Council of IoM3 from 1996 to 2003.
- He is a Fellow of the British Institute of Non-Destructive Testing and a former Member of the PCN Certification Management Committee.
- He is a Chartered Engineer.

**Abstract.** Coal-to-chemical conversion based on the Lurgi-type gasification systems are a long-established approach to the exploitation of fossil fuel reserves, very often for strategic National benefit. However, in certain instances, extreme corrosion attack may occur on the thick-walled gasifier vessels and/or in the downstream processing systems.

Similarly, waste-to-energy combustion equipment has been a popular and profitable approach to the utilization of waste streams to produce high-grade heat and electricity. Unfortunately, such boilers also



can sustain unexpectedly high rates of corrosion attack that results in frequent unscheduled downtime, a requirement for replacement disposal capacity and lost revenue.

This speech considers the underlying causes of such damage and describes successful approaches that have been employed to investigate and overcome these issues.

#### **Keynote Speech 4: Superheating Property of REBa<sub>2</sub>Cu<sub>3</sub>O<sub>7-x</sub> Thin Film and Its Applications in the Growth of REBa<sub>2</sub>Cu<sub>3</sub>O<sub>7-x</sub> Superconductors**

**Speaker: Prof. Xin Yao, Distinguished Professor of Yangtze River Scholar, Ministry of Education of China. School of Physics and Astronomy, Shanghai Jiao Tong University, China.**



**Biography:** Prof. X. Yao, from Shanghai Jiao Tong University, got his Bachelor and Master degrees in Department of Material Science and Engineering of Shanghai Jiao Tong University, and got his Ph.D. at University of Liverpool in 1993. He was a research scientist at ISTECH (International Superconductivity Technology Center) in Japan (1993-2001). During work at ISTECH, he has grown the world record, large-sized REBCO single crystals. In his new lab at Shanghai Jiao Tong University (from 2002), he has extended the growth of REBCO crystals to the bulks and LPE films, focusing his interests on the phase formation and the growth mode in various RE-Ba-Cu-O systems.

**Abstract.** Recently, we reported a superheating phenomenon of REBCO (RE=Nd, Sm, Y) thin films, e.g. the complete decomposition of a c-oriented YBCO film occurs at a temperature of 50 K higher than its peritectic temperature ( $T_p$ ). The origins and influential factors of superheating property were investigated, involving film oriented structures, substrate materials, and phase diagram natures. On the other hand, for fundamental study and practical application, the film-seeded growth of REBCO superconductors has been conducted in our lab by Top-Seeded Solution-Growth, Top-Seeded Melt-Growth, and Liquid Phase Epitaxy. Making full use of their unique superheating property, we employed REBCO films as universal seed materials to induce the growth of 1) high-performance & high  $T_p$  REBCO crystals, such as NdBCO and SmBCO, 2) large-sized crystals, 3) recycling failed bulks.

## **Keynote Speech 5: Comprehensive Strength Optimization of Spacecraft and Orbital Station Components: Outlook of Ukrainian State-of-the-Art and Off-Shelf Designs**

**Speaker: Dr. Alexander Khotsianovsky, Pisarenko Institute of Problems of Strength of the National Academy of Sciences of Ukraine, Ukraine.**



**Biography:** Dr. Alexander Khotsianovsky is currently a senior research fellow at the Institute of Problems of Strength (IPS), Kiev, Ukraine. After receiving the Ph.D. degree in Mechanical Engineering and Fracture Mechanics at the National Academy of Sciences of Ukraine in 1990, he conducted research in the field of innovative spacecraft and aircraft applications in IPS, Ukraine, as an invited research fellow in German Aerospace Research Establishment (DLR, Cologne, Germany, 1993-1995), and Computer Control Solutions (CCS, Dublin, Ireland, 2001-2002). In 1996-2000, he was hired by USAID as a full-time technical consultant to six technical assistance projects financed by the USAID with the total budget of 5 mln USD in four CIS countries, including Ukraine (Kiev and ten more pilot cities), Russia (Irkutsk), Moldova (Cisinau) and Kazakhstan (Alma-Aty). His current research interests cover a wide range: from coatings, tribology, and fretting-fatigue of advanced space/aircraft materials to polymer-additive applications and numerical simulation of hydroelasticity problems for supercavitation high-speed underwater vehicles. He takes an active part in the advanced material development for spacecraft applications in Ukraine (IPS, Kiev) and ONR/DARPA international projects on drag reduction of superspeed underwater vehicles (2014-2017). He is the managing editor of the international journal *Strength of Materials* (Springer, US), guest editor in IOP Conference Series and other International Journals indexed in different databases. In the last five years, he participated as keynote speaker in one Global Conference on Polymer and Composite Materials (PCM 2016) and one International Conference on Material Strength and Applied Mechanics (MSAM2018) as well as four Global conferences on Materials Science and Engineering (CMSE2013, 2014, 2015, 2017).

**Abstract.** The current state of spacecraft development worldwide implies a rejection of earlier achievements like US Spaceshuttles and Russian Proton/Progress launchers. Meanwhile, even older developments in Mir and SkyLab orbital stations return to focus in new lunar projects. The overinflated prices of NASA (US) and Roskosmos (Russia) can no longer withstand the competition with aggressive commercial players like Space X, Arianespace, etc. At this transition period, niche players with decades of experience in the spacecraft development, like Ukraine, become instrumental for larger countries, like China, with ambitious space projects. Based on the long-term experience in testing and numerical calculations of spacecraft designs for the Mir orbital station, Buran analogue of US Spaceshuttles, and Mriya jumbo carrier, the author presents an outlook on the comprehensive strength optimization of spacecraft and orbital station components. The Ukraine state-of-the-art and off-shelf designs, Sea launch space program, and ongoing co-operation of the Pisarenko Institute of Problems of Strength with the Yuzhnoye State Design Office, which produces Zenit-3SL launch vehicles designed for transporting medium-weight payloads to various orbits, as well as the hot topics of the annual Chinese-Ukrainian forum on cooperation in space, are discussed in detail. The problem of linking the post-Soviet safety margin approach with a crack-arrest-based Western approach to the safety of highly

loaded spacecraft components is examined by an example of the foldable truss structure for solar batteries of orbital stations, which has been successfully modified by the author as a subcontractor. Such issues as fretting-fatigue and laser welding under space conditions, and the lack of stress intensity threshold in certain Western superalloys used in the air- and spacecraft industries are critically covered. Conclusive remarks are made regarding the commercial revival prospects of Ukrainian off-shelf designs in the International/Chinese space projects based on technical and economic criteria.

## **Keynote Speech 6: Development of Cast High Performance Aluminum Alloy Used in Advanced Diesel Engine**

**Speaker: Prof. Jianping Li, Materials and Chemical Engineering School, Xi'an Technological University; Head of Shaanxi Province Engineering Research Centre for Light Weight Alloys and Metal Matrix Composites, China.**



**Biography:** Prof. Jianping Li obtained his Ph.D degree in Composite Materials from Shanghai Jiaotong University, China in 1997. As a visiting professor, he researched recrystallization and corrosion behavior of magnesium alloys in Manchester University, UK for two years. He is currently the Professor in Materials and Chemical Engineering School, Xi'an Technological University, China, and the head of Shaanxi Province Engineering Research Centre for Light Weight Alloys and Metal Matrix Composites. His research is mainly associated with developing advanced cast/wrought aluminum /magnesium alloys and discontinuous reinforced metal matrix composites, as well as corrosion control of light alloys and novel surface engineering for protection and functionality. The research has led to more than 10 national and province/ministry awards of China, including Second Prize of National Science and Technology Progress Award, China in 2016, and First Prize of Science and Technology Progress Award, Shaanxi, China in 2011.

### **Abstract.**

The abstract is not available in the conference program. Prof. Li will directly report his work in the conference.

# Part III Oral Presentations

## **Devices Provided by the Conference Organizer:**

- Laptops (with MS-Office & Adobe Reader)
- Projectors & Screen
- Laser Sticks

## **Materials Provided by the Oral Presenters:**

- PowerPoint (Note: Please show your paper ID as CMSE\*\*\*\* in the last page.)

## **Duration of Each Presentation:**

- Invited Oral Session: 20 Minutes of Presentation, including 3-5 Minutes of Q&A
- Regular Oral Session: 15 Minutes of Presentation, including 3-5 Minutes of Q&A

## **Awarding for the Oral Presentation:**

- We will hold a voting for the oral presentation, participants will get a vote to select the best 1-2 oral presentations in each session.
- Each session chair has 3 votes for the best oral presentations.
- Top elected presenters will each be awarded with a free ticket to CMSE2019.

## **Note:**

- Please tell the Session Chair (before the start of your session) that you are present. Please kindly let us know in advance if you cannot be present.

## Oral Session 1: Advanced Material Technologies

**Session Chair: Prof. Thanasis D. Papathanasiou, Nazarbayev University, Republic of Kazakstan.**

**Time: 14:00-18:20, Nov.2**

**Location: 3F, Conference Room 1 (Hua Fu Gong Hotel)**

Time	Paper ID	Paper Title	Presenter
14:00-14:20	CMSE3321	Formulation of bioactive substances with supercritical fluids	Masa Knez Hrnčić
14:20-14:40	CMSE3368	Developed the new novel system of 2.5-d permutation power transmission line to decrease electro-magnetic influence at high technology nano-fab	Yulin Song
14:40-15:00	CMSE3372	Silicon carbide electrothermally tunable mems resonators	Boris Svilicic
15:00-15:20	CMSE3459	Novel electronic and magnetic properties in transition-metal oxide ceramics	Yuichi Shimakawa
15:20-15:40	CMSE3535	Structure-oriented models for the permeability of across random and aggregated fiber arrays	Thanasis D. Papathanasiou
15:40-16:00	CMSE3589	New materials for energy applications with high EROEI values (energy returned on energy invested)	Massimo Innocenti
<b>16:00-16:10</b>	<b>Coffee Break</b>		
16:10-16:30	CMSE3620	Carbon-based hybrid composites as high-performance electromagnetic wave absorbers: facile fabrication and their underlying absorbing mechanism	Ruiwen Shu
16:30-16:50	CMSE3637	Stimuli-responsive polymer composites with controllable kinematics	Lidong Zhang
16:50-17:05	CMSE3377	Computer-aided design choices for increasing resolution during metallic prostheses 3D printing	Chioibas Diana
17:05-17:20	CMSE3562	Pressure induced new spin-states in Ni-25at%Mn mechanical alloy under high pressure	Fumihisa Ono
17:20-17:35	CMSE3499	Boosting Li-S batteries by a synergy between sulfur and conductive carbon materials	Xiaohui Zhao
17:35-17:50	CMSE3470	Nucleation control in PVT growth of AlN single crystals on polycrystal tungsten substrates	Honglei Wu
17:50-18:05	CMSE3736	Design and synthesis of advanced aromatic polymer materials from precursor strategy	Weifeng Zhao
18:05-18:20	CMSE3703	Research development of biodegradable Mg-Zn-Ca metallic amorphous materials	Jianli Wang

## Oral Session 2: Energy Materials and Semiconductors

Session Chair: Prof. Qixin Guo, Saga University, Japan.

Time: 14:00-18:20, Nov.2

Location: 3F, Conference Room 2 (Hua Fu Gong Hotel)

Time	Paper ID	Paper Title	Presenter
14:00-14:20	CMSE3314	Self-powered flexible inorganic electronic systems	Keon Jae Lee
14:20-14:40	CMSE3342	Wide band gap ZnO applications	Tetsuya Yamamoto
14:40-15:00	CMSE3425	Lift-off patterning of graphene and graphene-Ag nanowire hybrid films for flexible transparent electrode applications	Eui-Tae Kim
15:00-15:20	CMSE3443	Optical and electrical properties of epitaxial VO <sub>2</sub> thin films and device applications	Xun Cao
15:20-15:40	CMSE3619	Characteristics of gallium oxide based semiconductors	Qixin Guo
15:40-16:00	CMSE3671	High quality InP based III-V compound semiconductor mid-IR quantum dots	Xiaohong Tang
<b>16:00-16:15</b>	<b>Coffee Break</b>		
16:15-16:35	CMSE3709	Energy storage mechanism of defective graphene and silicene as potential electrode materials for Li/Na ion batteries	Xiaofeng Fan
16:35-16:50	CMSE3441	On using photoconductivity decay to determine Si free carrier recombination lifetime: possibilities and challenges	Ivan Schemerov
16:50-17:05	CMSE3433	Microwave assisted solvothermal synthesis of chalcogenide composite photocatalyst and its photocatalytic CO <sub>2</sub> reduction activity under simulated solar light	Gangjuan Lee
17:05-17:20	CMSE3471	Direct-current-driven Inorganic Electroluminescence in Rare-earth and Li co-doped ZnO Pellets	Yuta Matsushima
17:20-17:35	CMSE3547	Freestanding porous sulfurized polyacrylonitrile fiber as a cathode material for advanced lithium sulfur batteries	Ying Liu
17:35-17:50	CMSE3550	Nanoscale SnO <sub>2</sub> /Porous carbon nanofiber composite as binder-free anode material for lithium-ion batteries	Jungwon Heo
17:50-18:05	CMSE3566	Comparison of SnO <sub>2</sub> -CNT composite and SnO <sub>2</sub> -carbon black mixture as anode for Li-ion batteries	Guiqiang Diao
18:05-18:20	CMSE3551	Preparation and electrochemical properties of different ordered mesoporous carbons for lithium sulfur batteries	Xueying Li

## Oral Session 3: Mechanics and Mechanical Technologies

**Session Chair: Prof. K.K. Ramachnadrn, Government Engineering College Thrissur, India.**

**Time: 14:00-18:20, Nov.2**

**Location: 3F, Conference Room 3 (Hua Fu Gong Hotel)**

Time	Paper ID	Paper Title	Presenter
14:00-14:20	CMSE3337	Mechanical and microstructural characteristics of dissimilar GTA welded HSLA steel/AISI316L steel butt joints	K. K. Ramchnadrn
14:20-14:40	CMSE3402	Dynamical casimir effect meets material science	Viktor Dodonov
14:40-15:00	CMSE3585	Behaviour of laced built-up columns made of aluminium alloy	Ivan Balaz
15:00-15:20	CMSE3376	Design, manufacturing and testing of Ti6Al4V cranial mesh prostheses printed by laser melting deposition	Andrei Popescu
15:20-15:40	CMSE3412	Microstructure evaluation with processing parameters of tool steels processed by additive manufacturing	Yong-Jin Kim
15:40-16:00	CMSE3631	Strain hardening of glassy polymers: theory and simulation	Didier Long
<b>16:00-16:20</b>	<b>Coffee Break</b>		
16:20-16:40	CMSE3328	Electrocoagulation/electroflotation as a liquid effluent treatment process: performance and limits	Abdel H. Essadki
16:40-17:00	CMSE3524	Scaffolds for tissue engineering	Madeleine Djabourov
17:00-17:20	CMSE3347	Fundamental issues during soldering in microelectronics	Fiqiri Hodaj
17:20-17:35	CMSE3527	Hydrodynamic and solids residence time distribution in a binary bubbling fluidized bed: 3D computational study coupled with the structure-based drag model	Zheng Zou
17:35-17:50	CMSE3608	Effect of eutectic phase on microstructure and mechanical properties of Al-Zn-Ni-Mg-Cu Cast aluminum alloy	Dahui Chen
17:50-18:05	CMSE3718	Qualitative study of the rate of Ni-B alloy during non-equilibrium solidification	Dandan Fan
18:05-18:20	CMSE3717	The relation of undercoolings and solidification volume of hypereutectic Al-Si alloys	Ying Xiao

## Oral Session 4: Nanomaterials

**Session Chair: Prof. Sigitas Tamulevičius, Kaunas University of Technology, Lithuania.**

**Time: 08:30-12:35, Nov. 3**

**Location: 3F, Conference Room 1 (Hua Fu Gong Hotel)**

Time	Paper ID	Paper Title	Presenter
08:30-08:50	CMSE3316	Development of new SiC nanocomposites with enhanced electrical conductivity	Pavol Hvizdoš
08:50-09:10	CMSE3341	Size selective optical and photocatalytic properties of silicon carbide nanoparticles	David Beke
09:10-09:30	CMSE3363	Hydrothermally synthesized TiO <sub>2</sub> nanorods decorated with $\alpha$ -alumina for the power conversion efficiency of dye-sensitized solar cells	T. S. Senthil
09:30-09:50	CMSE3373	Stable and environment-hard vacuum nanoelectronic devices for aerospace applications	Masayuki Nakamoto
09:50-10:10	CMSE3437	Nanowires grow using special laser techniques	Aurelian Marcu
10:10-10:30	CMSE3458	Synthesis and tribological properties of field's alloy nanoparticles as additives in liquid poly-alfa-olefin solution	Chaoming Wang
<b>10:30-10:40</b>	<b>Coffee Break</b>		
10:40-11:00	CMSE3463	Nanomaterials for tertiary treatment of waste-water	C. N. Murthy
11:00-11:20	CMSE3621	Pressureless densification, microstructure tailoring and performance optimization of Ta <sub>0.8</sub> Hf <sub>0.2</sub> C solid solution ultra-high temperature ceramics	Jie Yin
11:20-11:40	CMSE3639	Coarsening-resistant nanocrystalline metal alloys: modeling and fabrication	Nicolas A. Cordero
11:40-12:00	CMSE3397	Graphene composite sensors for human activity detection	Choon Gi Choi
12:00-12:15	CMSE3616	Bio-waste derived nanomaterials for photocatalytic and sensor application	Kaviya Somasundaram
12:15-12:35	CMSE3691	Supramolecular self-assembled nanocarbon materials: preparation, characterization, and properties	Sumin Wang



## Oral Session 5: Surface and Coatings Technology

**Session Chair: Prof. Tsung-Lung Li, National Chia-Yi University, Taiwan, China.**

**Time: 08:30-12:30, Nov.3**

**Location: 3F, Conference Room 2 (Hua Fu Gong Hotel)**

Time	Paper ID	Paper Title	Presenter
08:30-08:50	CMSE3325	Self-protecting disk lubricant: D-MH2	Paul H. Kasai
08:50-09:10	CMSE3380	Application of an aqueous solution-gel deposition methodology to the sustainable preparation of thin film composites in the multiferroic BiFeO <sub>3</sub> -Bi <sub>4</sub> Ti <sub>3</sub> O <sub>12</sub> system	Carlos Gumiel
09:10-09:30	CMSE3396	Photoemission spectroscopy of alkali-doped rubrene thin films: a first-principles study	Tsung-Lung Li
09:30-09:50	CMSE3442	Strain engineering in ITO thin films deposited on polymer: a synchrotron study	Philippe Goudeau
09:50-10:10	CMSE3444	Towards the utilization of plasma deposited nanostructured TiO <sub>2</sub> films as photoanodes in DSSCs	Rony Snyders
10:10-10:30	CMSE3580	Amphiphobic coatings with self-cleaning properties for photovoltaic panels	Michele Ferrari
<b>10:30-10:40</b>	<b>Coffee Break</b>		
10:40-11:00	CMSE3496	Triboelectromagnetic phenomena in combinations of moving tribomaterials against stationary ones	Keiji Nakayama
11:00-11:15	CMSE3403	Development of a new class of 100% polyester binders to produce sustainable polyurethane coatings: Technological evaluation and lifecycle assessment	Nelly Garcia
11:15-11:30	CMSE3418	Structural analysis of hydrogenated diamond-like carbon coatings prepared using magnetron sputtering	Yin-Hsiang Mao
11:30-11:45	CMSE3478	Macrocyclic inhibitor for corrosion of N80 steel in 3.5% NaCl solution saturated with CO <sub>2</sub>	Ambrish Singh
11:45-12:00	CMSE3505	Hereditary corrosion resistance and biocompatibility of Ca and Ce-doped phosphate conversion coatings on magnesium alloys	Changyang Li
12:00-12:15	CMSE3602	Molecular behaviors in thin lubrication film	Haoyu Li
12:15-12:30	CMSE3624	Laser ablation characteristics of Al-Ti energetic multi-layer films	Yuan Gao

## Oral Session 6A: Characterization and Testing

**Session Chair: Dr. Alexander Khotsianovsky, Pisarenko Institute of Problems of Strength of the National Academy of Sciences of Ukraine, Ukraine.**

**Time: 08:30-12:35, Nov.3**

**Location: 3F, Conference room 3 (Hua Fu Gong Hotel)**

Time	Paper ID	Paper Title	Presenter
08:30-08:50	CMSE3307	Influence of loading frequency on short fatigue crack behavior for LZ50 axle steel	Bing Yang
08:50-09:10	CMSE3329	Creation of highly water-splitting photocatalyst by controlling cocatalyst	Yuichi Negishi
09:10-09:30	CMSE3356	Silicon carbide detectors for high resolution analysis of laser generated plasma radiation	Yongbiao Shi
09:30-09:50	CMSE3367	The effect of wear parameters and heat treatment on two body abrasive wear of Al-SiC-Gr hybrid composites	N Ch Kaushik
09:50-10:10	CMSE3474	Effect of heat treatment on microstructure of Cu-Sn alloy	Jun Hyun Han
10:10-10:25	CMSE3420	Surface modification with ferritin nanoparticles modulates the biocompatibility and analytical performance of implanted glucose sensors	Yifeng Lei
<b>10:25-10:35</b>	<b>Coffee Break</b>		
10:35-10:50	CMSE3569	An optimized hydrothermal process facilitated by citric acid for simultaneous synthesis and functionalization of cellulose nanocrystals	Arun Saini
10:50-11:05	CMSE3556	Microstructure and secondary carbides in destabilised and tempered 25wt.%Cr-2.4wt.%C-0.7wt.%Mo cast iron	Amporn Wiengmoon
11:05-11:20	CMSE3673	Dry friction properties, microstructure and mechanical properties of MCMBs-SiC composites with different MCMBs contents	Xiaojie Wang
11:20-11:35	CMSE3647	Two-dimensional Nb-based $M_4C_3T_x$ solid solutions (MXenes) and their sodium storage performances	Ping Cai
11:35-11:50	CMSE3636	Effect of heat treatment on Microstructure and Corrosion resistance of extruded ZK80 Mg alloy	Fenghong Cao
11:50-12:05	CMSE3414	Fixation of biosynthesized metallic nanoparticles on electrospun polymer fibers: a possible way of effective treatment for wound healing	Zuzana Konvickova
12:05-12:20	CMSE3611	Influence of molybdenum on microstructure and mechanical properties of sintered Fe-Mo-Si-C alloys	Kittikhun Ruangchai
12:20-12:35	CMSE3702	Effects of alloy composition and cooling rate on the morphology, volume fraction of quasi-crystalline of Mg-Zn-Y alloys	Jiaona Yuan

## Oral Session 6B: Characterization and Testing

**Session Chair: Prof. Bing Yang, Southwest Jiaotong University, China.**

**Time: 14:00-17:10, Nov.3**

**Location: 3F, Conference Room 2 (Hua Fu Gong Hotel)**

<b>Time</b>	<b>Paper ID</b>	<b>Paper Title</b>	<b>Presenter</b>
14:00-14:20	CMSE3581	Stimulus triggered delivery systems for chronic wound healing	Maria del Carmen Moran
14:20-14:40	CMSE3612	Pluronic F127 polymeric micelles as drug carriers for pH controlled release of Salicylate	Margarita Valero Juan
14:40-15:00	CMSE3638	Investigation on the compression dynamic recrystallization softening behavior of 23Cr economical duplex stainless steel with Mn addition	Yinhui Yang
15:00-15:20	CMSE3386	Fabrication of multi-layer aluminum alloys with improved mechanical properties by roll-bonding process	Cha-Yong Lim
15:20-15:40	CMSE3365	Fabrication of Zr <sub>2</sub> WP <sub>2</sub> O <sub>12</sub> /ZrV <sub>0.6</sub> P <sub>1.4</sub> O <sub>7</sub> composite with a nearly zero-thermal-expansion property	Ikuo Yanase
15:40-15:55	CMSE3650	The influence of content of aluminum nanoparticle additives on the laser ignition of B/KNO <sub>3</sub>	Duo Tang
<b>15:55-16:10</b>	<b>Coffee Break</b>		
16:10-16:25	CMSE3571	Bio-polyurethane wrapped sodium alginate-cellulose nanofibres sponge amalgamated with bio-extracts for soft tissue engineering	Chandravati Yadav
16:25-16:40	CMSE3661	Geometrical and microstructural characteristics of the TIG-CMT hybrid welding in 6061 aluminum alloy cladding	Ying Liang
16:40-16:55	CMSE3684	Microstructures and properties of solid-state-sintered silicon carbide membrane supports	Yajie Li
16:55-17:10	CMSE3450	Development of carbon nanoparticles by catalytic graphitization of modified phenolic resin with chromium(III) acetylacetonate	Hamid A. F. Al-Falahi

## Oral Session 7: Structural Materials

**Session Chair: Prof. Arkadiusz Kwecien, Cracow University of Technology, Poland.**

**Time: 14:00-17:10, Nov.3**

**Location: 3F, Conference Room 3 (Hua Fu Gong Hotel)**

<b>Time</b>	<b>Paper ID</b>	<b>Paper Title</b>	<b>Presenter</b>
14:00-14:20	CMSE3359	Cold deformed aluminum parts for the automotive industry	Alexander Wimmer
14:20-14:40	CMSE3361	One-year monitoring of a historic masonry bell tower	Reto Cantieni
14:40-15:00	CMSE3366	Reduction of stress concentration by polymer flexible joints in seismic protection of masonry infill walls in RC frames	Arkadiusz Kwecien
15:00-15:20	CMSE3408	Multiscale modeling for the long-term creep of concrete considering the interfacial transition zone surrounding aggregate	Frederic Grondin
15:20-15:35	CMSE3456	A "double-multi" model for carbonation and its multi-factors on chloride binding in concrete composites	Xiaohan Shen
15:35-15:50	CMSE3594	Multi-phase modelling of chloride diffusion in concrete composite suffering freeze-thaw action	Wenqiang Jiang
<b>15:50-16:10</b>	<b>Coffee Break</b>		
16:10-16:25	CMSE3609	Structure design and simulation analysis of the carbon fiber reinforced polymer main frame	Qinglei Wang
16:25-16:40	CMSE3656	Experimental study on utilization of waste foundry sand as embankment and structural fill	Muhammad Farjad Iqbal
16:40-16:55	CMSE3725	New ways to develop pro-environmental polymeric composite materials	Tao Qiang
16:55-17:10	CMSE3517	Influence of H <sub>2</sub> S corrosion on tensile properties and fracture toughness of X80 pipeline steel	Lei Gu

## Part IV Poster Presentations

### Materials Provided by the Conference Organizer:

- X Racks & Base Fabric Canvases (60cm×160cm, see the figure)
- Adhesive Tapes or Clamps
- Production of the Posters

### Materials Provided by the Presenters:

- Home-made Posters or Posters printed by the Conference Organizer

### Requirement for the Posters:

- Material: not limited, can be posted on the Canvases;
- Size: 160cm (height) ×60cm (width);
- Content: for demonstration of the presenters' paper. Please make sure the poster presentation be clear and easy to be understood, explanation with figures is good;

### Requirement for the Presenters:

- Stand beside his/her Poster through the Session, and discuss with the readers about his/her paper;
- Please **do not print** your poster presentation **with A4 paper**, which is not acceptable to present.

### NOTE:

- If you print the poster by yourself, please bring it to the Conference Secretariat at the registration desk on November 1st, and the organizing committee will be responsible for the posting.
- After the poster session, we will keep your poster by 20:00 November 2nd, please contact us in advance if you want to take it away.



## 1. Poster Presentation: Part A

**Time: 17:20-18:00, Nov.3**

**Location: 3F, Conference Room 2 (Hua Fu Gong Hotel)**

<b>Paper ID</b>	<b>Paper Title</b>	<b>Presenter</b>
CMSE3349	Synthesis and composition characterization of $K_{0.5}Na_{0.5}NbO_{3-}K_{Sr}2Nb_{5}O_{15}$ ceramics	Liangliang Liu
CMSE3392	Influence of layup structure on impact resistance of composite laminates and its simulation analysis	Letian Teng
CMSE3409	Microstructural evolution, tribological property and optimization of sputtering Zr-doped DLC coatings	Maw-Tyan Sheen
CMSE3410	Optimization of residual stress behaviors for laser-mixed WC(Co,Ni) coatings	Ming-Der Jean
CMSE3421	Structure fatigue strength and life prediction of MAR-M247 nickel-base superalloy gas turbine blade with multiple carbide defects	Hao Lin
CMSE3424	Crack behaviour in the environmental barrier coating of ceramic matrix composite	Dai Ho
CMSE3427	Surface modification of bumper rubber by chemical precipitation method	Maw-Tien Lee
CMSE3438	Laser interaction with thin metallic materials	Mihai Serbanescu
CMSE3449	Effect of tool/material interface temperature on flow stress and Zener- Holloman parameter in Al 6082 friction stir butt welds	N. Ch. Kaushik
CMSE3488	The amorphization of monolayer MoS <sub>2</sub> induced by strong oxygen plasma treatment	Jianling Meng
CMSE3495	Research on the equipment to set automatically the grouting bags under free spanning of submarine pipelines	Bo Zhang
CMSE3497	Mechanical experiment and buckling analysis of X grouted clamp	Zhuo Wang
CMSE3518	Behavioral analysis of hydrogen in metals using Vickers micro-hardness technique	Lei Gu
CMSE3707	The morphology controled deposition of ZnO nanocrystalline	Lina Wang
CMSE3739	Dermis-inspired conductive gels with dually synergetic network towards flexible electronics	Hongwei Zhou
CMSE3733	Study on evolution behavior of heat resistance phases in multicomponent Al-Si alloys	Feng Xia
CMSE3728	Microstructure and properties of AlSn <sub>20</sub> coating prepared by magnetron sputtering	Qiaoqin Guo
CMSE3731	Isothermal crystallization kinetics of Fe <sub>75</sub> Cr <sub>5</sub> P <sub>9</sub> B <sub>4</sub> C <sub>7</sub> metallic glass with cost-effectiveness and desirable merits	Tao Xu
CMSE3740	Preparation and properties of Ge-Se Glass	Junfeng Xu
CMSE3741	Effect of NiAl reinforced phase content on microstructure and properties of Fe - based Alloy	Yaping Bai

CMSE3742	Study on the secondary phases formation during the solidification of Al-Si-Mg Alloys	Yongqin Liu
CMSE3743	Study and design of switch-based memristor technology integration on FR-4 copper clad laminate	Jiaying Jian
CMSE3744	Calorimetric studies on Ge <sub>20</sub> Sb <sub>15</sub> Se <sub>65</sub> glass	Chuanlei Gao
CMSE3745	Comparison of CdTe, Cd <sub>0.9</sub> Zn <sub>0.1</sub> Te and CdTe <sub>0.9</sub> Se <sub>0.1</sub> crystals grown by Bridgman: optical performance	Tao Li

## 2. Poster Presentation: Part B

**Time: 17:20-18:00, Nov.3**

**Location: 3F, Conference Room 3 (Hua Fu Gong Hotel)**

CMSE3540	Optimization of heat treatment conditions for polyimide fibers by wet spinning process	Young-sek Sur
CMSE3543	The preparation and properties of pyrogen with various additives for food packaging	Seul-ki Yoon
CMSE3548	Iron sulfide embedded carbon nanofibers for superior lithium-ion storage	Anupriya K. Haridas
CMSE3549	FeS incorporated graphitic carbon for sustainable lithium-ion storage	Rakesh Saroha
CMSE3554	Empirical study on modular apartments in Korea	Joonsoo Chung
CMSE3577	The regulation of calcium sulfate cement composites by silk fibroin with different size scale	Xiaojie Lian
CMSE3578	Characterization of the actuating response of the graphene oxide/MEO <sub>2</sub> MA hydrogel layer	Hsuan-Yi Hsiao
CMSE3584	Ta-doped Li <sub>7</sub> La <sub>3</sub> Zr <sub>2</sub> O <sub>12</sub> solid electrolytes with cubic structure and high density synthesized by self-consolidation method	Pengcheng Zhao
CMSE3586	Bridge ev. no. 324-018 in pardubice, damage investigation of prestress cables in segmental box girder concrete bridge	Stanislav Rehacek
CMSE3601	Improved properties of gypsum-based composites for humid environment	Daniel Dobias
CMSE3672	Improved oxidation resistance of ZrB <sub>2</sub> powders by various oxide coating	Xiaoqiang Feng
CMSE3677	Research on the microstructure and impact properties for low temperature austenitic ductile iron	Henan Tang
CMSE3682	Study of metal alloys electroplated for the production of jewels	Emanuele Salviatti
CMSE3724	Catalysis of graphene oxide immobilized cobalt tetrakis (4-hydroxyphenyl) porphyrin for ethylbenzene oxidation	Guan Huang
CMSE3746	Effect of melt composition and state on melt solidification characteristic parameters	Tonghui Liu
CMSE3747	Synthesis of WS <sub>2</sub> crystal by chemical vapor deposition	Lei Luo

CMSE3737	Preparation and properties of Se-Sb chalcogenide glass	Guozhen Sun
CMSE3738	Qualitative study of the microstructure and recalescence rate of Ni-B alloy in non equilibrium solidification	Xiao Wang
CMSE3748	Effect of the substrateLocation on the properties of MoS2 crystal grown	JiaoJie Yue
CMSE3749	Influence of modified surface defects on photocatalytic performance of ZnO hollow nanospheres	Kexin Zhu
CMSE3750	Synthesis and characterization of flower-like MoS2 microspheres by hydrothermal method	Pengfan Dong
CMSE3735	Extrusion-based photocuring 3D printing APPPA hydrogel for tissue engineering	Tao Luo
CMSE3734	Effects of multi-walled carbon nanotubes grafted polycaprolactone on the stereocomplex crystallization behavior of polylactic acid	Feng Tang
CMSE3732	Preparation and crystallization behavior of POSS-PCL/ polylactic acid blends	Shoujia Li
CMSE3655	Effect of prior-annealing heat treatment on destabilisation behaviour in 28 wt.%Cr-2.6 wt.%C high chromium cast iron	Amporn Wiengmoon



# Part V How to Get to Shaanxi Hua Fu Gong Hotel

## Shaanxi Hua Fu Gong Hotel

**Address:** Sunshine road, Weiyang Lake tourism development zone, Xi'an City, Shaanxi Province, China

**Homepage:** <http://www.sxhfg.com.cn>

**Telephone:** (8629)86677777

### 1. Xi'an Xianyang International Airport(西安咸阳国际机场)-- Shaanxi Hua Fu Gong Hotel (32.1km)

#### 1) Taxi: 38 minutes' drive, about 80 RMB

To taxi driver: Please take me to 西安市未央湖旅游开发阳光大道陕西华浮宫酒店

#### 2) Airport bus:

- Starting from Xi'an Xianyang International Airport T2 terminal station(西安咸阳国际机场 2 号航站楼)
- Getting off at the 2nd stop (North railway station)(火车北站)
- Walking around 380 meters to arrive at the bus station (Xi' an North Railway stop )(西安北)
- Taking Bus no. 314 towards Jinghe industry park(泾河工业园)
- Getting off at the 5th stop (Jingjiacun) (景家村) and walking around 1100 meters to: Shaanxi Huafugong Hotel

#### 3) Airport bus:

- Starting from Xi'an Xianyang International Airport T2 terminal station(西安咸阳国际机场 2 号航站楼)
- Getting off at the 1st stop (North of the City Bus Station)(城北客运站)
- Walking around 230 meters to arrive at the bus station (North of city bus stop )(城北客运站)
- Taking Bus no. 509 towards Changqing Hubing park(长庆湖滨花园)
- Getting off at the 19th stop (Weiyang Lake) (未央湖) and walking around 50 meters to: Shaanxi Huafugong Hotel

### 2. Xi'an Railway Station(西安站)-- Shaanxi Hua Fu Gong Hotel (18km)

#### 1) Taxi: 40 minutes' drive, about 45 RMB

#### 2) Bus:

- Walk around 430 m to North of Xi'an Railway Station bus stop.
- Taking bus No. 266 from North of Xi'an Railway Station bus stop
- Getting off at 10th stop (The library) (图书馆)
- Change to another bus No.509 towards Changqing Hubing park(长庆湖滨花园)
- Getting off at the 17th stop (Weiyang Lake) (未央湖) and walking around 50 meters to: Shaanxi Huafugong Hotel

### **3. Xi'an North Railway Station-- Shaanxi Hua Fu Gong Hotel (9km)**

1) **Taxi:** 18 minutes' drive, about 22 RMB

2) **Bus:**

- Taking bus No. 314 from Xi'an North Railway Station
- Getting off at the 5th stop (Jingjiacun) (景家村) in Dongfeng road(东风路) and walk around 230m to (Jingjiacun) (景家村) bus stop in Yangguang road(阳光大道).
- Change to bus No.509 and get off at the 2nd stop (Weiyang Lake) (未央湖) and walking around 50 meters to: Shaanxi Huafugong Hotel

### **4. Xi'an South Railway Station-- Shaanxi Huafugong Hotel (52km)**

Taxi: 60 minutes' drive, about 145 RMB

**Tip: Please show the address to the taxi driver if you need to take a taxi to Shaanxi Hua Fu Gong Hotel.**

请送我到/Please take me to:

陕西华浮宫酒店/Shaanxi Hua Fu Gong Hotel

西安市未央湖旅游开发区阳光大道

电话/Tel.: +86029 86677777.



**Baoji Titanium Industry Co., Ltd**, established in 1999, is a leading professional titanium and its alloy producer and the largest titanium alloy production and research base in China.

Baoti's main products are titanium and its alloy sheet/plate, tube/pipe, bar/billet, strip, rod/wire, ring, forging, casting, clad material. Our products are widely used in aerospace, aviation, chemical processing, oil and gas, power generation, metallurgy, medical equipment, marine engineering, geothermal engineering, refrigeration engineering, sports as well as automotive industries.

We are capable of producing all grades of C. P. titanium and most of titanium alloys as below in accordance with AMS, ASTM, MIL, ASME, DMS, AWS, JIS specification. We have been approved by PED, NORSOK, TUV and famous Aerospace companies including Airbus, Boeing, Bombardier, Rolls-Royce, etc.

Ti-6Al-4V	Ti-0.2Pd	Ti-6Al-7Nb
Ti-6Al-4V ELI	Ti-0.3Mo-0.8Ni	Ti-2.5Cu
Ti-15V-3Cr-3Sn-3Al	Ti-3Al-8V-6Cr-4Zr-4Mo	Ti-6Al-6V-2Sn
Ti-10V-2Fe-3Al	Ti-6Al-2Sn-4Zr-2Mo	Ti-3Al-2.5V
Ti-5Al-2.5Sn	Ti-6Al-2Sn-4Zr-6Mo	

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