



PTM2020

The 8th International Conference on Solid→Solid Phase Transformations in Inorganic Materials

June 29th - July 3rd, 2020 Xi'an, China

Call for Papers (2nd Announcement)

Organized by



The Chinese Society for Metals (CSM)

Co-sponsored by

The Japan Institute of Metals and Materials (JIM)

Materials Australia (MA)

The Chinese Materials Research Society (C-MRS)

The Korean Institute of Metals and Materials (KIM)

The Minerals, Metals & Materials Society (TMS)



Conference Website: www.ptm2020.com



Contents / Important Dates

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Important Dates

- Extended Abstract Submission Deadline
Saturday, February 15, 2020
- Aaronson Award Application Deadline
Saturday, February 15, 2020
- Author's Registration Deadline
Wednesday, April 15, 2020
- Early Registration Deadline (Regular Participant)
Wednesday, April 15, 2020
- Deadline for Conference Registration and Hotel Reservation Cancellations
Monday, June 15, 2020
- Registration
Sunday, June 28, 2020
- Conference
June 29-July 3, 2020

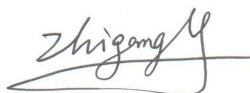
Invitation to PTM2020

Dear Colleagues,

It is our pleasure to announce that the 8th International Conference on Solid→Solid Phase Transformations in Inorganic Materials (PTM2020) will be held in Xi'an, China from June 29 to July 3, 2020. The goal of PTM2020 is to bring together international experts on solid→solid state phase transformation from academia and industry to meet and discuss their research each other in a friendly atmosphere.

Together with Athens, Cairo and Rome, Xi'an is among the four major ancient civilization capitals of the world. It is on the natural westward land route out of China into Central Asia, the starting point and terminus of the Silk Road, which brought the city material wealth as well as religious and cultural melting for over a thousand years. Xi'an boasts a history of more than 3,000 years, of which more than 1100 years were as the national capital for 13 dynasties. It has many places of historic interest, including: the Terracotta Warriors, the Banpo Museum, the Huaqing Spring, Shaanxi Museum of History, etc. In addition to technical program, a varied social program is planned for all participants and their companions.

We invite you to join us in Xi'an and look forward to hosting a successful and inspiring conference!



Prof. Zhigang Yang

Tsinghua University

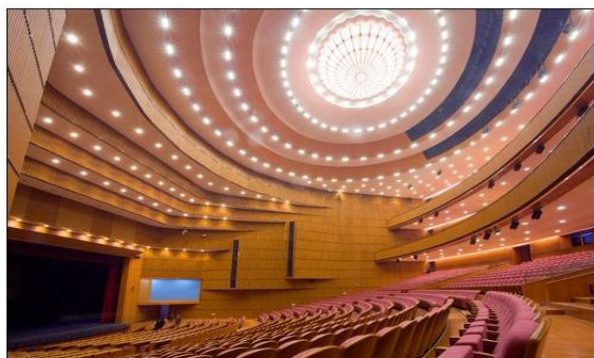
Chairman of Organizing Committee of PTM2020

Conference Outline

Date: June 29-July 3, 2020

Venue: Xi'an Qujiang International Conference Center

Official Language: English



History and Scope

The International Conference on Solid→Solid Phase Transformations in Inorganic Materials (PTM), held every 5 years, is organized in a way to maximize the interaction and discussion between researchers in the field. The 8th PTM conference will be held in China for the first time, the previous conferences being held in:

1981 - Pittsburgh, USA

1987 - Cambridge, United Kingdom

1994 - Nemaquin Woodlands, USA

1999 - Kyoto, Japan

2005 - Phoenix, USA

2010 - Avignon, France

2015- Whistler, Canada

The following broad topics will be covered by PTM2020, include but not limited to:

- Diffusional transformations including nucleation, growth, coarsening, precipitation, spinodal decomposition, interphase migration, austenite-ferrite transformation, order-disorder transformations, elasticity
- Displacive transformations including martensitic transformations and shape memory alloys
- Advances in experimental techniques including scattering and diffraction techniques, atom probe, high-resolution electron microscopy and laser ultrasonics
- Advances in modelling and simulation including atomistic simulations, phase field and other meso-scale simulations, multi-scale modelling, fundamentals of structures, thermodynamics and diffusion
- Industrial applications including phase transformations in advanced high strength steels, thermo-mechanical processing, welding and nuclear materials
- Emerging areas including phase transformations during additive manufacturing, phase transitions in interfaces, high entropy alloys; amorphous alloys/quasicrystals, nanomaterials and materials for sustainable energy

Organizers / Committees

Organized by

The Chinese Society for Metals (CSM)

Co-sponsored by

The Japan Institute of Metals and Materials (JIM)

Materials Australia (MA)

The Chinese Materials Research Society (C-MRS)

The Korean Institute of Metals and Materials (KIM)

The Minerals, Metals & Materials Society (TMS)

Organizing Committee

Zhigang Yang (Chair), Professor of Tsinghua University

Hao Chen, Associate Professor of Tsinghua University

Chengjia Shang, Professor of University of Science & Technology Beijing

Qing Song (Secretary General), Professor of The Chinese Society for Metals

Xinjiang Wang, Professor of The Chinese Society for Metals

Advisor to The Organizing Committee

Yuqing Weng, Academician, The Chinese Society for Metals

International Scientific Committee

Markus Apel RWTH Aachen University Germany

Benoit Appolaire University of Lorraine France

Annika Borgenstam The Royal Institute of Technology Sweden

Francisca G. Caballero Spanish National Center for Metallurgical Research (CENIM-CSIC) Spain

Long-Qing Chen Penn State University USA

Amy J. Clarke Colorado School of Mines USA

| | | |
|-----------------------------------|---|------------------|
| Alexis Deschamps | Grenoble Institute of Technology | France |
| Masato Enomoto | Ibaraki University | Japan |
| Alphonse Finel | University of Paris-Saclay | France |
| Tadashi Furuhashi | Tohoku University | Japan |
| Ernst Gamsjäger | Montanuniversität Leoben | Austria |
| Baptiste Gault | Max-Planck-Institut für Eisenforschung | Germany |
| Hélio Goldenstein | University of São Paulo | Brazil |
| James M. Howe | University of Virginia | USA |
| Mingxin Huang | The University of Hong Kong | Hong Kong, China |
| Christopher Hutchinson | Monash University | Australia |
| Pascal Jacques | Université catholique de Louvain | Belgium |
| Xuejun Jin | Shanghai Jiao Tong University | China |
| Ernst Kozeschnik | Technische Universität Wien | Austria |
| Yanjun Li | Norwegian University of Science and Technology | Norway |
| Feng Liu | Northwestern Polytechnical University | China |
| Yongchang Liu | Tianjin University | China |
| Lei Lu | Shenyang National Laboratory for Materials Science | China |
| Haiwen Luo | University of Science and Technology Beijing | China |
| Emmanuelle Marquis | University of Michigan | USA |
| Knut Marthinsen | Norwegian University of Science and Technology | Norway |
| Matthias Militzer | The University of British Columbia | Canada |

| | | |
|------------------------------------|--|---------------|
| Goro Miyamoto | Tohoku University | Japan |
| Tetsuo Mohri | Tohoku University | Japan |
| Jianfeng Nie | Monash University | Australia |
| Michel Perez | Institut National des Sciences Appliquées de Lyon | France |
| Eugen Rabkin | Technion-Israel Institute of Technology | Israel |
| Michel Rappaz | Ecole Polytechnique Fédérale de LaUSAnne | Switzerland |
| Jose M. Rodriguez-Ibabe | University of Navarra | Spain |
| Chadwick W. Sinclair | The University of British Columbia | Canada |
| Ingo Steinbach | Ruhr-University Bochum | Germany |
| Peter W. Voorhees | Northwestern University | USA |
| Yunzhi Wang | The Ohio State University | USA |
| Wei XU | Northeastern University | China |
| Jer-Ren Yang | National Taiwan University | Taiwan, China |
| Wenzheng Zhang | Tsinghua University | China |
| Hatem S. Zurob | McMaster University | Canada |

Plenary Speakers

Tadashi Furuhashi (Hillert-Cahn Lecturer)

Professor
Tohoku University, Japan

Presentation Title: Interface in solid-solid transformation - interplay of kinetics and crystallography

Tadashi Furuhashi is a Professor and a Deputy Director of the Institute for Materials Research (IMR), Tohoku University, Japan. He obtained Bachelor and Master degrees at Kyoto University, Japan and a PhD at Carnegie Mellon University, U.S.A. Immediately after graduation, he joined the faculty of engineering, Kyoto University in 1989 and made research and education as an assistant and associate professor. Then he became a professor at Tohoku University in 2005.



His research activity covers a broad area in physical metallurgy of steels and non-ferrous alloys, such as phase transformations and precipitation, deformation and recrystallization, microstructure control by thermo-mechanical and thermo-chemical processing. Particularly, crystallography and interfacial phenomena in solid-solid phase transformation and their relation to nucleation and growth kinetics are main subjects of interest throughout his entire career.

He also actively contributes to various academic societies in metallurgy field, the Japan Institute of Metals and Materials (JIM), the Iron and Steel Institute of Japan (ISIJ), the Japan Society for Heat Treatment (JSHT), the Minerals, Metals & Materials Society (TMS) and ASM International (ASMI). He was a past vice president of JIM and currently a vice president of ISIJ. He is also an editor of Acta and Scripta Materialia.

Long-Qing Chen

Professor

The Pennsylvania State University, USA

Presentation Title: To be determined



Chen is Hamer Professor of Materials Science and Engineering, Professor of Engineering Science and Mechanics, and Professor of Mathematics at Penn State and the Editor-in-Chief for npj Computational Materials by Springer-Nature. He received his Ph.D. from MIT in Materials Science and Engineering in 1990 and joined the faculty at Penn State in 1992. He has published over 600 papers (with > 40,000 total citations and H-index of 95 according to the Google Scholars) in the area of computational phase transformations and microstructure evolution and multiscale modeling of structural metallic alloys, functional oxide thin films, and energy materials and is a Clarivate Analytics Highly Cited Researcher. He received the 2014 MRS Materials Theory Award, a Guggenheim Fellowship in 2005, a Humboldt Research Prize in 2017, 2011 The Minerals, Metals and Materials Society (TMS) EMPMD Distinguished Scientist Award, 2008 ASM International Silver Medal, and the 2015 Lee Hsun Lecture Award by the Shenyang Institute for Metals of the Chinese Academy of Sciences. He is a Fellow and Life Member of TMS and a Fellow of the Materials Research Society (MRS), American Physical Society (APS), American Association for the Advancement of Sciences (AAAS), American Ceramic Society (ACerS), and ASM International (ASM).

Alexis Deschamps

Professor
Univ. Grenoble Alpes, France

Presentation Title: Kinetics of phase transformations: what do we learn from in-situ studies?



Alexis Deschamps did his undergraduate studies at Ecole Centrale de Paris in France, followed by a Master degree at McMaster University in Canada and a PhD at Grenoble Institute of Technology, France. After a post-doctoral stay at UBC, Vancouver, Canada, he has held an academic position at the Grenoble Institute of Technology since 1998, with research stays at Monash University, UBC and NTNU. His main research focus is on the experimental determination of the kinetics of phase transformations, mainly in aluminum alloys and in steels, using the combination of large scale facilities, electron microscopy and atom probe tomography. His broader research area deals with the link between the obtained microstructures and various properties, including strength, strain hardening, fracture and corrosion.

Jeffrey Hoyt

Professor
McMaster University, Canada

Presentation Title: Phase transformations and molecular dynamics simulations



In 1986, Jeff Hoyt received his PhD in Physical Metallurgy from the University of California, Berkeley. From 1988-1996, he was a faculty member in the Department of Mechanical and Materials Engineering at Washington State University. For the next ten years Dr. Hoyt was a member of the technical staff at the Sandia National Laboratories at both the Livermore, CA and Albuquerque, NM sites. In 2007 Dr. Hoyt returned to academia and joined the faculty at McMaster University in the Department of Materials science and Engineering. After serving as Department chair for five years, Prof. Hoyt semi-retired in 2016. Prof. Hoyt's research interest is all aspects of phase transformations, as well as computational techniques such as molecular dynamics and Monte Carlo methods.

Christopher Hutchinson

Professor
Monash University, Australia

Presentation Title: To be determined



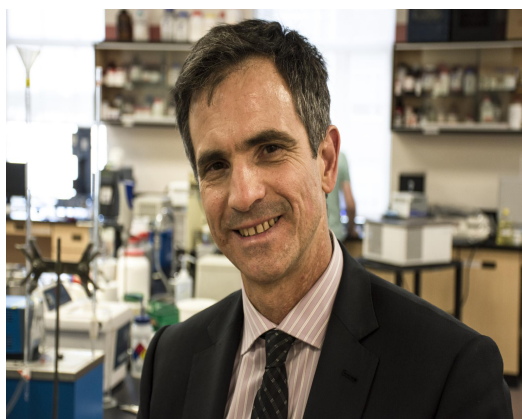
Christopher Hutchinson is a Professor in the Department of Materials Science and Engineering at Monash University, Melbourne, Australia. He obtained his PhD from the University of Virginia, USA, and after several post-doctoral years in Grenoble, France, joined Monash University. His research emphasizes the manipulation of the chemistry and processing of engineering alloys to create new alloy structures that exhibit improved combinations of mechanical properties such as strength, elongation, impact, wear and fatigue etc. Solid-state phase transformations is a core component of his work. Approximately half of his research is conducted in collaboration with industry and half funded by fundamental research agencies such as the Australian Research Council (ARC). Professor Hutchinson was a recipient of an ARC Future Fellowship, was a Chief Investigator in the ARC Centre of Excellence for Design in Light Metals and is currently a Chief Investigator in the ARC Industry Transformation Training Centre in Alloy Innovation for Mining Efficiency. He is an Editor for Acta and Scripta Materialia.

Alejandro G. Marangoni

Professor

University of Guelph, Canada

Presentation Title: Engineering the nanoscale and functionality of edible fat crystal networks: from chocolate to butter



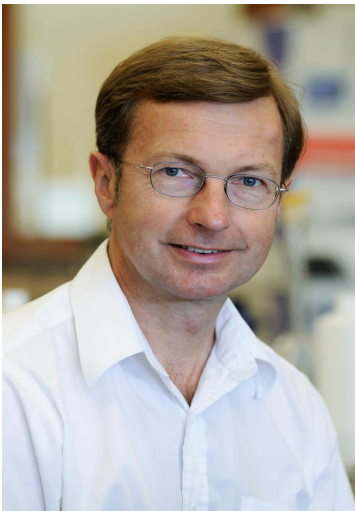
Dr. Alejandro G. Marangoni is a Professor and Tier I Canada Research Chair in Food, Health and Aging at the University of Guelph, Canada. His work concentrates on the physical properties of lipidic materials in foods, cosmetics and biolubricants. With an H-index of 70 and 18,000 citations of his work, he has published over 400 refereed research articles, 82 book chapters, 18 books, and over 40 patents. He is the recipient of many awards including the 2013 AOCS Stephen Chang award, the 2014 IFT Chang Award in Lipid Science, the 2014 AOCS Supelco/Nicholas Pelick Award, the 2015 ISF Kaufmann Medal, the 2017 AOCS Alton E. Bailey Medal, and the 2019 European Lipid Technology Award from Euro Fed Lipids. Marangoni is a fellow of the American Oil Chemists' Society, the Institute of Food Technologists and the Royal Society of Chemistry (U.K.). He is the first Editor in Chief of both Current Opinion and Current Research in Food Science, EIC of the Lipid Library (AOCS), and past EIC of Food Research International. Dr. Marangoni has trained over 100 people in his laboratory; many occupy positions of importance in the academe and industry, including 13 professors at major North American universities. Dr. Marangoni was honored as one of the 10 most influential Hispanic Canadians in 2012 and a Fellow of the Royal Society of Canada, the National Academy of Sciences, in 2018.

Matthias Militzer

Professor

The University of British Columbia, Canada

Presentation Title: Multi-scale modelling of phase transformations – Where do we stand?



Matthias Militzer is the ArcelorMittal Dofasco Chair in Advanced Steel Processing and the Director of the Centre for Metallurgical Process Engineering at the University of British Columbia in Vancouver. He received a Diploma in Physics from the University of Technology in Dresden, Germany in 1983 and a Ph.D. in Metal Physics from the Academy of Sciences in East Germany in 1987. He moved to Canada in 1990 where he was first a Postdoctoral Fellow at McGill University before joining the University of British Columbia in 1993. He has published more than 200 papers in refereed journals and conference proceedings. His primary field of research is modelling the microstructure evolution during thermo-mechanical processing of steels and other metals. Currently, his major research activities include multi-scale modelling of phase transformations in steels, accelerated cooling of steels and in-situ measurements of microstructures using laser ultrasonics for metallurgy. He is a Fellow of the Canadian Institute for Mining, Metallurgy and Petroleum (CIM) and received the ASM Henry Marion Howe Medal 2010 and the Canadian Metal Physics Award in 2014.

Wenzheng Zhang

Professor
Tsinghua University, China

Presentation Title: Role of Interfaces on the Morphology of Phase Transformation Products

Wenzheng Zhang graduated from Fuzhou University in 1978, and earned her M.D. from USTB in 1983 and Ph.D. from McMaster University in 1991. She joined Tsinghua University in 1997, and became a professor in the Department (School) of Material Science and Engineering since 1999. Her research interests focus on quantitative understanding of microstructures developed from solid-state phase transformations. She identified the general features of preferred interfaces between the precipitates and the matrix in terms of singularity and periodicity, and developed a generic approach for quantitatively interpreting the precipitation crystallography, especially with measurable $\Delta\mathbf{g}$ reciprocal vectors. She and her students have continuously made advances in the interfacial dislocation theory, for calculating the geometries of preferred interfaces and complicated dislocation structures. They also made progress on the experimental and simulation study of interface migration, and revealed the shear-coupled migration of the habit plane as the cause to the surface relief effect associated with growth of precipitates. In addition, her team has contributed both free software and database to facilitate the study of transformation crystallography. Wenzheng Zhang has authored ~130 peer-reviewed papers. She is a member of Phase Transformations Committee (TMS) and Committee of Defects in Solids (Chinese Society of Physics).



Invited Speakers

Sébastien Yves Pierre Allain

Institut Jean Lamour
France

Markus Apel

RWTH Aachen University
Germany

Benoit Appolaire

University of Lorraine
France

Pascal Bellon

University of Illinois Urbana-Champaign
USA

Annika Borgenstam

KTH Royal Institute of Technology
Sweden

Laure Bourgeois

Monash University
Australia

Yann Le Bouar

Laboratoire d'Etude
des Microstructures (Onera-Cnrs)
France

Francisca G. Caballero

Spanish National Center for Metallurgical
Research (CENIM-CSIC)
Spain

Jianghua Chen

Hunan University
China

Amy Clarke

Colorado School of Mines
USA

Sabine Denis

University of Lorraine
France

Hongbiao Dong

University of Leicester
United Kingdom

Alphonse Finel

Laboratoire d'Etude
des Microstructures (Onera-Cnrs)
France

Damien Fabrègue

INSA Lyon
France

Ernst Gamsjäger

Montanuniversitaet Leoben
Austria

Hélio Goldenstein

University of São Paulo
Brazil

Mohamed Goune

Université de Bordeaux
France

Heung Nam Han

Seoul National University
Korea

James M. Howe

University of Virginia
USA

Mingxin Huang

The University of Hong Kong
Hong Kong, China

Tilman Hickel

Max-Planck-Institut
für Eisenforschung GmbH
Germany

Zengbao Jiao

The Hong Kong Polytechnic University
Hongkong, China

Xuejun Jin
Shanghai Jiao Tong University
China

Ernst Kozeschnik
Vienna University of Technology
Austria

Toshiyuki Koyama
Nagoya University
Japan

Eric Lass
NIST
USA

Huijun Li
University of Wollongong
Australia

Tong Li
Ruhr-Universität Bochum
Germany

Yanjun Li
Norwegian University of Science and
Technology
Norway

Feng Liu
Northwestern
Polytechnical University
China

Yongchang Liu
Tianjin University
China

Haiwen Luo
University of Science and Technology
Beijing
China

Jian Luo
University of California, San Diego
USA

Knut Marthinsen
Norwegian University of Science and
Technology
Norway

Bonvalet Manon
KTH Royal Institute of Technology
Sweden

Goro Miyamoto
Tohoku University
Japan

Tetsuo Mohri
Tohoku University
Japan

Nobuo Nakada
Tokyo Institute of Technology
Japan

Jianfeng Nie
Monash University
Australia

Jörg Neugebauer
Max-Planck-Institut
für Eisenforschung GmbH
Germany

Elena Pereloma
University of Wollongong
Australia

Sophie Primig
UNSW Sydney
Australia

Dong Qiu
RMIT University
Australia

Ma Qian
RMIT University
Australia

Eugen Rabkin
Israel Institute of Technology (Technion)
Israel

**Pedro Eduardo Jose
Rivera-Diaz-del-Castillo**
Lancaster University
United Kingdom

Jose Rodriguez-Ibabe

CEIT
Spain

Ingo Steinbach

Ruhr-University
Germany

Gang Sha

Nanjing University of Science and
Technology
China

Maria J. Santofimia

Delft University of Technology
The Netherlands

Jilt Sietsma

Delft University of Technology
The Netherlands

Cemal Cem Tasan

Massachusetts Institute of Technology
USA

Katsuyo Thornton

University of Michigan
USA

Peter W. Voorhees

Northwestern University
USA

Jian Wang

University of Nebraska – Lincoln
USA

Yunzhi Wang

Ohio State University
USA

Chris Wolverton

Northwestern University
USA

Wei Xu

Deakin University
Australia

Wei Xu

Northeastern University
China

Hongliang Yi

Northeastern University
China

Yufeng Zheng

University of Nevada, Reno
USA

Xiaoqin Zeng

Shanghai Jiao Tong University
China

Yuhong Zhao

North University of China
China

Sybrand van der Zwaag

Delft University of Technology
The Netherlands

Schedule / Events

Schedule

| Date | Activity | | |
|--|-------------------|-------------------|-------------------|
| | <i>Morning</i> | <i>Afternoon</i> | <i>Evening</i> |
| June 28, Sunday | — — | Registration | Registration |
| June 29, Monday | Plenary Session | Parallel Sessions | Welcome Reception |
| June 30, Tuesday | Plenary Session | Parallel Sessions | — — |
| July 1, Wednesday | Parallel Sessions | — — | — — |
| July 2, Thursday | Parallel Sessions | Parallel Sessions | Banquet |
| July 3, Friday | Parallel Sessions | — — | — — |
| Conference Venue: Qujiang International Conference Center | | | |

Welcome Reception

Monday, June 29 / Evening

Venue: Qujiang International Conference Center

All registered authors and participants are invited to attend the Welcome Reception free of charge.

A light meal and drinks will be served.

Banquet

Thursday, July 2 / Evening

Venue: Qujiang International Conference Center

All registered authors and participants are invited to attend the Banquet free of charge.

Call for Papers

Abstract Submission

If you wish to contribute a presentation or poster for PTM2020, please submit an abstract (less than 150 words) through the conference website: www.ptm2020.com by **December 31, 2019**.

Additional details including venue and accommodation information will be posted on the official website shortly and shown in the next announcement.

Do not hesitate to broadcast this announcement to your colleagues which may show interest in PTM2020 conference.

Extended Abstract

The extended abstracts are requested to submit through the conference website before **February 15, 2020**. All the accepted extended abstracts will be published in the conference proceedings which will be released to the public by China Machine Press and will be available at the conference beginning on 28 June 2020.

Please kindly download the authors guide, sample format and copyright transfer form from the conference website (www.ptm2020.com).

Presentation

- ✧ Authors could choose the type of presentation (oral or poster) in the registration. The final result will be given to the author after the paper is reviewed by experts.
- ✧ Each presentation could be arranged in the technical program only if at least one author's registration fee is paid before **April 15, 2020**.

Conference Proceedings Book

According to the tradition of PTM Conferences, the printed proceedings copy can be ordered at the time of conference registration. The price of printed version will be informed in the end of May.

Aaronson Award / Hillert-Cahn Award

Aaronson Award

The organizing committee of PTM2020 is pleased to announce the offering of the “Aaronson Award”, an award to be given every PTM conference to an outstanding graduate student or young researcher in recognition of his/her exceptional contribution to the physical metallurgy of phase transformations. The award is intended to commemorate Prof. Aaronson’s passion to understand phase transformations as exemplified through his teaching, scientific research, and in particular, his support and mentoring of students and young colleagues in the field. The award is open to all current graduate students or those who have graduated less than three years prior to PTM2020 (i.e. on or after July 1, 2017). Students should indicate that they wish to apply for the award when submitting their abstract for the conference. An application will consist of a curriculum vitae and a reference letter from their immediate supervisor, including a statement that they are eligible for the award.

Applications should be sent as pdf-file to Conference Secretariat (ptm2020@csm.org.cn) before February 15, 2020.

Please refer also to the official conference website: www.ptm2020.com regarding further information. Based on these applications a short list of nominees will be selected. These nominees will be expected to present their papers orally at the conference and as a paper in the proceedings. The written papers and oral presentations will serve as an important criterion to finalize the selection of the awardee.

Hubert I. Aaronson:

Prof. Hubert I. Aaronson, simply known as Hub to his friends and colleagues, was a founding member of the PTM conference series. He received his BS, MS, and Ph.D. in metallurgical engineering from Carnegie Institute of Technology (now Carnegie Mellon University). Hub greatly influenced the field of solid-solid phase transformations through his publication of more than 300 scientific papers, teaching and support of young colleagues, and in organizing highly focused conferences on key topics important to the development of the field. He was particularly well known for his major contributions to the subjects of diffusional nucleation and growth, and the mechanisms of phase transformations. Hub was recognized with many awards, and was a member of the U.S. National Academy of Engineering; a fellow of The Minerals, Metals and Materials Society, and ASM International; and an honorary member of the Japan Institute of Metals. Hub’s passion to understand phase transformations, his impressive knowledge of the literature, his excellent experimental technique, and the high standards he set for himself and others in every aspect of scientific research, were an inspiration to his students and colleagues. As R.F. Mehl Professor Emeritus at Carnegie Mellon University, Hub pursued his passion for phase transformations until his passing in December 2005, not long after the PTM2005 conference. The PTM conference series will honor Hub’s many contributions to solid-solid phase transformations, and in particular to his support of students and young colleagues in the field, by offering the “Aaronson Award”, an award to be given every PTM conference to an outstanding graduate student or young researcher in recognition of his/her exceptional contribution to the physical metallurgy of phase transformations.

Hillert-Cahn Award

The Hillert-Cahn lectureship was instituted in 2010 in recognition of the outstanding contributions of John Cahn and Mats Hillert to the science of phase transformations in solid materials. It is awarded to a leading practitioner of the discipline at each PTM conference on recommendation of the organizing committee, and in consultation with Mats Hillert and former recipients.

Comment on the contributions of Mats Hillert and John Cahn:

Mats Hillert and John Cahn first made their presence widely felt in the 1950's with seminal publications: a wide-ranging contribution on the effects of interface curvature on phase transformations by Mats [1]; and a series of highly original papers by John with John Hilliard on the free energy of non-uniform solutions [2,3,4]. These and their many subsequent contributions played a major role in shaping the discipline. They each possess great breadth of interest and depth of insight; in addition to hosts of other honors, each has had a volume published of his selected works [5,6]. Without the contributions of Mats Hillert and John Cahn, the science of phase transformations would be a quite different and significantly diminished discipline.

1. Mats Hillert, *Jernkont. Ann.*, vol. 141, 1957, p. 11.
2. J. W. Cahn, J. E. Hilliard, *J. Chem. Phys.*, vol. 28, 1958, p. 258.
3. J. W. Cahn, *J. Chem. Phys.*, vol. 30, 1959, p. 1121.
4. J. W. Cahn, J. E. Hilliard, *J. Chem. Phys.*, vol. 31, 1959, p. 688.
5. "The selected works of John. W. Cahn", eds. W. Craig Carter, William C. Johnson, TMS, Warrendale, PA, 1998.
6. "Thermodynamics and phase transformations: the selected works of Mats Hillert", eds. John Ågren, Yves Bréchet, Christopher Hutchinson, Jean Philibert, Gary Purdy, EDP publishers, France. 2006.

Previous Recipients:

2010 - Gary R. Purdy, McMaster University, Canada

2015 - Peter Voorhees, Northwestern University, USA

Exhibition, Workshop & Sponsorship Opportunities

As the integral elements of the event, PTM2020 will feature the exhibition and workshop that will enable excellent exposure for company products, technologies, innovative solutions or services. The exhibition and workshop will be organized near the meeting room during PTM2020. The conference will offer an excellent opportunity for companies to do business and maintain key contacts with customers and suppliers. It is also a unique platform for them to promote new products, outline services and highlight key achievements.

Companies will be able to reinforce their participation and enhance their corporate identification by taking advantage of the benefits offered to them as sponsors of the conference.

If you would like to join the exhibition, workshop or sponsorship, please contact with the Conference Secretariat .

Exhibition Condition

The exhibition booth will be located near to the venue of PTM2020, the rent rate and booth size is Standard Booth: 3 × 3 (m²)

Standard booth will be provided: three-side wooden walls, one information desk, two chairs, two lights, one power outlet (220V) and company's name panel.

1. Exhibitors who wish to participate in the event please fill in Reservation form.
2. Exhibition booth arrangement: Due to venue constraints, the total number of booths is limited.

Booth will be arranged and confirmed based on the sequence of enrollment and payment successively.

Workshop

The workshops will be held in Xi'an Qujiang International Conference Center from 14:00 to 17:00 on 28 June 2020. Companies are welcome to demonstrate their products, equipment, new technologies and manufacturing processes.

✧ **CNY 10000/1 hour**

Registration / Visa Application

Registration

- ✧ Registration Deadline for Authors **April 15, 2020**
- ✧ Early Registration Deadline for Participants **April 15, 2020**

Fees

Authors

- ✧ **CNY 6000 (Regular)** **CNY 3800 (Student)**

- *Notes: 1) Each accepted paper will be published in the conference proceedings only if at least one author's registration fee is paid before **April 15, 2020**.
- 2) Oral or poster presentation will be arranged only if at least one author's registration fee is paid before **April 15, 2020**.
- 3) Students are requested to submit the copy of their student ID.

Participants

| Registration Fee | Before April 15, 2020 | After April 15, 2020 before June 15, 2020 | On June 28, 2020 |
|----------------------|-----------------------|--|------------------|
| Regular Participants | CNY 6000 | CNY 6500 | CNY 7000 |
| Retired Participants | CNY 3800 | CNY 4300 | CNY 4800 |
| Students | CNY 3800 | CNY 4300 | CNY 4800 |

**Note: Students are requested to submit the copy of their student ID*

Entitlement

Registration Fee covers:

Conference fee, All official documentation (abstract and technical program book, conference proceedings USB, etc.), Welcome Reception on Monday, Banquet on Thursday, Daily Coffee Break, Lunch buffet on Monday, Tuesday and Thursday, Name badge

Method of Payment

1. Online Payment

Through the conference online payment , all payments could be made in CNY by credit card.

2. Bank Transfer

Please transfer the registration fee to the following bank account, and specify with “PTM2020, Registration No.”. A copy of remittance certificate is requested to send to the conference secretariat or submit to the conference website.

| | |
|--------------------------------|---|
| Name of Bank | INDUSTRIAL AND COMMERCIAL BANK OF CHINA BEIJING MUNICIPAL BRANCH WANG FU JING SUB-BRANCH OFFICE |
| Beneficiary and Account Holder | The Chinese Society for Metals |
| Address | NO.237 WANG FU JING STREET, DONG CHENG DISTRICT, BEIJING 100006 P.R.CHINA |
| SWIFT ADDRESS | ICBKCNBJBJM |
| Account Number | 0200000709089116848 |

***Notes:** 1) The Check will not be accepted

2) The registration fee doesn't include the bank charge.

3) The receipt will be provided at the registration desk during the conference.

3. Payment in CNY at the Registration Desk

Attendees are requested to pay by credit card in CNY on the registration day.

Cancellation

Refunds cannot be given if cancellations received after June 15, 2020. Substitutions can be accepted at any time.

Please indicate the bank, branch and account number clearly to which the refund should be sent, and the refund will be made after the conference.

| Cancellation | Refund |
|----------------------|---|
| Before June 15, 2020 | 80% |
| After June 15, 2020 | No refund (Conference proceedings will be sent to the authors after the conference) |

Visa Application

People from most countries will be required to obtain a visa to enter the People's Republic of China. PTM2020 participants who are required to apply for visa to enter China can apply for a Chinese visa at the nearest Embassy or Consulate of China in your countries. For some visa applications, the process could take some time to complete, depending on your country of origin and certain visa restrictions so we would like to suggest you start the visa application as early as possible.

As conference hosts, we can issue you an invitation letter for your visa with the necessary signature and official stamp. If you need, please log in your account and download it in “My Page” after providing the information of your visa application.

Tips: Local organizers could NOT provide conference invitation letter to accompanying personnel according to related regulations. We suggest that accompanying personnel apply for tourism type visa, which will be much easier and require less paperwork.

Notes:

- 1. You should guarantee that all information provided is true and correct.**
- 2. In the letter for visa, we can only guarantee your stay in Xi'an during congress period.**
- 3. General visa information should be obtained from your local Embassy or Consulate of China.**

Conference Venue / Hotel Reservation

Conference Venue

The conference will be held in Xi'an Qujiang International Conference Center (QICEG) from June 29-July 3, 2020. QICEG is ideally located in the heart of Xi'an city adjacent to The Dayan Pagoda, Daci'en Temple, and which is next to the "Hui Zhan Zhong Xin (会展中心)" Station of subway line 2.

Hotel Reservation and Official Travel Agent

Xi'an Kaili Conference & Exhibition Co., Ltd. has been appointed as the official conference agent for the PTM2020 and will handle the hotel accommodation, travel and transportation during the conference. If you would like to get more information, please contact with:

Mr. Qi Gao

Xi'an Kaili Conference & Exhibition Co., Ltd.

Email: gaoqi@kailimice.cn

For the participants of PTM2020, the special rates will be effective from June 29 to July 3, 2020. All the participants are requested to book their accommodation through the conference website. Please kindly note that the one night's room fee will be charged as deposit.

**Notes:*

- 1) The rooms are reserved on a first-come-first-served basis.
- 2) The deadline of hotel reservation cancellation is **June 15, 2020**. Refunds cannot be given if cancellations received after the deadline.
- 3) If you have any questions about the hotel reservation, please contact us via email: gaoqi@kailimice.cn

The recommended hotels and room rate are as follows:

| | |
|------------------|---|
| Hotel | Ramada Plaza Xi'an South (西安曲江华美达广场酒店) ★★★★★ |
| Room Type | Standard Room (Twin beds / King bed) |

Room Rate 600CNY (Including Breakfast)

Network Free WIFI

Introduction Ramada Plaza Hotel is only 5 minutes walking distance from the “Qujiang International Conference Center”.

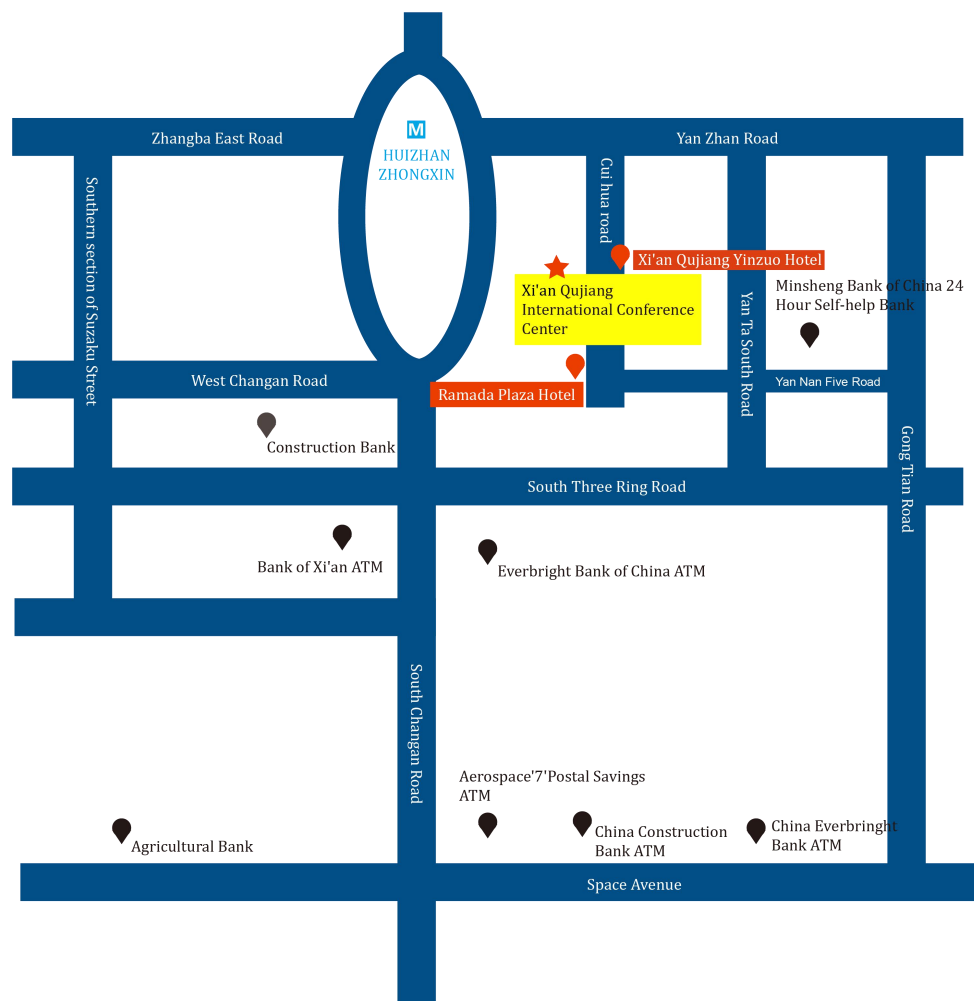
Hotel **Xi'an Qujiang Yinzuo Hotel (西安曲江银座酒店) ★★★★★**

Room Type Standard Room (Twin beds / King bed)

Room Rate 500CNY (Including Breakfast)

Network Free WIFI

Introduction Xi'an Qujiang Yinzuo Hotel is only 10 minutes walking distance from the “Qujiang International Conference Center”.



General Information

General Information

Climate and Clothing

During June and July, the average temperature in Xi'an 22-33°C.

Currency

Only CNY is acceptable at regular store and restaurants. Foreign currency or traveler's checks can be change into CNY at major banks, hotels and airports.

Credit Cards

Credit cards are widely accepted. Commonly recognized cards include Visa and MasterCard.

Tipping

There is no custom of tipping anywhere in China, even at hotels and restaurants. On certain occasions, however, a service charge is added to the bill.

Electrical Appliances

The voltage in China is 220 volts for electrical appliances. Electrical sockets usually accept two-pronged (vertical) plugs and three-pronged (vertical) plugs.

Insurance

The organizer cannot accept responsibility for accidents which might occur. It is recommended that participants take out adequate medical, travel and personal insurance prior to the commencement of travel.

Contact (about the conference)

Dr. Hao Chen, Tsinghua University, Beijing 100084, China

Mr. Xin Zhao, Ms. Fang Liu, The Chinese Society for Metals, 76 Xueyuan Nanlu,
Beijing 100081, China

Phone: + 86 10 6521 1205

Fax: + 86 10 6512 4122

Email: ptm2020@csm.org.cn Website: www.ptm2020.com

Access



Access from the nearest stations

Line 1: From XI'AN North Railway Station

Please take the subway line 1 to Hui Zhan Zhong Xin (会展中心) station, and then walk from Exit C to Qujiang International Conference Center.

Line 2: From XI'AN Railway Station

Please take the subway line 1 to Beidajie (北大街) station, and then transfer to Hui Zhan Zhong Xin (会展中心) station of subway line 2, walk from Exit C to Qujiang International Conference Center.

Access by air

From Xi'an Xianyang International Airport

- 110-120 minutes by shuttle bus

Please take the airport shuttle bus to Ramada Plaza Xi'an South Hotel, and walk 150 meters to Qujiang International Conference Center.

➤ 50-60 minutes by taxi

Please show Taxi drivers the following note for your convenience to the conference venue.

Please take me to Xi'an Qujiang International Conference Center. Thank you!

请送我到西安曲江国际会议中心

(地址: 西安市曲江新区汇新路 15 号; 电话: +86-29-87655888)