

OZ-20
11th German-International
Symposium on Nanostructures
 March 1-3, 2020, Wenden/Olpe, Germany



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supported by the
 European Academy of
 Sciences & Arts



supported by the
 German Federal
 Ministry of Economic
 Affairs and Energy



supported by the
 Korean Powder
 Metallurgy Institute

Welcome to OZ-20

Dear participants of OZ-events, dear colleagues and dear ALL, this is OZ-20, the 11th German-International Symposium on Nanostructures.

The call for papers & posters, for exhibitors and attendees is now open !

Please refer to the [OZ-website](#), send your abstract and register online for attending and/or exhibiting still at virtually zero cost.

[OZ-20: industrial addresses & ceremonial lecture]

opening address on behalf of German Industry	opening address on behalf of Italia Industry	ceremonial lecture on nuclear fusion
Dr. Andreas Topp , board member of Continental and responsible for the Taraxagum™ dandelion tire undertaking.	Andrea Romiti , CEO of APR S.r.l., key aerospace company providing to Pratt & Whitney's adv. F135 engines / 5th gen. F-35 fighter aircraft.	Prof. Dr. Friedrich Wagner , former Director of the Max-Planck-Institute for Plasma Physics; President of the European Physical Society 2007-09.

[OZ-20: keynote presentations]

Pawel Zieba , Polish Academy of Sciences, Director, Inst. Metallurgy & Materials.	Kevin Zhuang , CEO & President of Gemch Material Technology (Suzhou) Co., Ltd	Dr. Gabriel Veith , Senior Research Scientist at Oak Ridge National Laboratory.	Dr. David Fraboulet , Direction Scientifique CEA-DRT, French Atomic Energy Commission.	Prof. Dr. B. S. Murty , Director at the Indian Institute of Technology Madras at Chennai.
Prof. Dr. Talant Ryspaev , Vice-Rector at East Kazakhstan State Technical University.	Dr. Michael Rieth , Head of Dept. Metallic Materials, Karlsruhe Inst. of Technology.	Hendrik Lötter , Director E-Mobility, ZF Friedrichshafen AG.	Prof. Dr. Gregor Luthke , CEO, Nanobay GmbH, aw. toxicologist.	Prof. Dr. Horst Hahn , Director of Nanotechnology DNT at Karlsruhe Inst. of Technology

Scientific highlights are expected e. g. within the global strategic activities in ODS and ODS-NFA materials including the revitalization of PM2000 and lightweight-strengthening, also addressing additive manufacturing routes and MIM. In this context we are happy to announce relevant activities around OZ-20 already now:



On Sunday March 1, 2020 upfront the welcoming reception of OZ-20, the EUREKA-cluster Metallurgy Europe will hold a board-meeting at the Zoz Technology Center (ZTC) at Olpe. A limited number of OZ-20 attendees may find access and right after join the welcoming reception of OZ-20 at the Olpe City Hall nearby.



On Wednesday, March 4, right after OZ-20 and also at ZTC, the Nanotun3D-day for the second time will represent another important

step in the dissemination of PM2019, the novel dispersion strengthened Ti-6Al-4V-0.5dps powder/bulk where the nanostructured powder composites are "pre-consolidated" by HIP and HP and subsequently atomized by EIGA to be commercialized in SLM and EBM processing. Present but still preliminary results demonstrate 30% increase of strength and 15% in elongation at the same time ! The consortiums target are commercial powder products particularly for Additive Manufacturing processing.



The Nanotun3D project has received funding from the European Union's Horizon 2020 research and innovation programme under grant agreement No. 685952.

post conference special interest program

Nanotun3D-day

www.nanotun3d.eu



PM2019 is resulting from the ongoing Nanotun3D EU-H2020 funded undertaking (grant agreement 685952), dispersoids (dps) are Y2O3, SiC and core-shell SiC@TiO2. This special interest program including some online processing demonstrations powder (HKP) and bulk (HIC) addresses not only the Nanotun3D industrial advisory board but also all OZ-20 attendees, pre-registry requested.

OZ-philosophy resulting in

- no parallel sessions
 - 2-day event only
 - no conference fee and no exhibitor cost
 - but first class speakers and exhibitors from a small but excellent society
 - with industrial focused overview presentations at leading edge
- might be the key for the success of these annual global brainstorming events.

OZ-20 will be held from March 01-03, 2020 at Olpe in Germany "next door" to Wenden, where OZ-18, OZ-16, OZ-14, OZ-12, OZ-10 and OZ-08 have been organised.

OZ-Symposium was held annually since 2008 alternating between Germany and Japan. The first session-day is always the first Monday in the month of March. The Sunday before is for arrival, registration and get-together and insofar is listed in the schedule. The conference dinner / party [meet'n'greet] will always be on Monday evening. Since OZ-17 in Japan has been skipped, OZ-18 has been the 10th meeting and OZ-20 will be the 11th. In the future, the symposium may alternate annually between Germany and other strategic countries such as Korea, Mexico, Russia, USA, China, and others.

Please block your calendar for OZ-20 and please consider that also and even a small table top expo from your company/from your organization does stimulate discussion and interaction very much !

Once you browse the [OZ-website](#) you will find out, that we are working hard to make your trip to and in Germany very easy and also and again very cost effective which shall be a good platform for a good successful meeting.

Further announcements will be given by frequent updates of this website and also by email-circulars. If you are not already but want to be on the emailing-list, [please click here](#).

Thank You very much and we hope to SEE YOU next March in Germany.

Monte Cassim, Sebastian Diaz, Henning Zoz, Jai Sung Lee & Hans Fecht

Announcement & Call for Papers

abstract submission until December 31, 2019
acceptance of papers by January 15, 2020 and earlier

Why you should come:

The goal of the OZ-Symposium on Nanostructures is:

- to meet people who are working in your niche-fields as given under "Technical Program";
- to gain new ideas and latest information in the field of materials science and process engineering;

in other words – looking over the edge of the plate in a kind of global brainstorming

Technical Program:

OZ-symposia do provide a small but first-class technical program to cover aspects in the growing niche and at the same time super important field of nanostructured materials in applied science and technology - to make more with less - more benefit to creation, with less material:

- High Kinetic Processing (MA, HEM, RM)
- Severe Plastic Deformation, BioProcessing
- Microstructural Design, Nano-Meso-Hybride Structures
- Sintered Metal/Ceramic & Compaction
- MIM, CIM, Spark Plasma Sintering
- Plasma Coating Techniques
- Additive Manufacturing










in "nanostructure" applications such as

- Nanocrystalline & Amorphous Materials
- ODS/NFA, MMC, MCC, CCC
- High Entropy Alloys
- Carbon Nanotube utilization
- M/C-Polymer compounds & WPC
- Solid State Chemistry
- Construction Materials Cement/Concrete/DesertSand
- Fabrication of FuelCell, H2-Tank & Battery

in the field of advanced materials for industry, life, energy and nature-saving.

Symposium Organizer:

The OZ-20 chief-organizers are Prof. Monte Cassim / Ritsumeikan, Prof. Sebastian Diaz / CIITEC, Prof. Henning Zoz / Zoz, Prof. Jai Sung Lee / Hanyang and Prof. Hans Fecht / Ulm-IMN and EUREKA.

Support:

OZ-Symposium today is kindly supported by the European Academy of Sciences and Arts, by the German Federal Ministry of Economic Affairs and Energy as well as the Korean Powder Metallurgy Institute. Also the German Federal Ministry of Education and Research is highly appreciated for making "participation of nanoTruck and later InnoTruck possible.

OZ-events in the past have been supported by the Ritsumeikan Global Innovation Research Organization (R-GIRO) Project and mainly financed by

the Ministry of Education, Culture, Sports, Science and Technology, Japan (MEXT) within the Grant-in-Aid for Scientific Research on Innovative Area in the academic project "Bulk Nanostructured Metals".

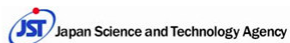
The Ritsumeikan Global Innovation Research Organization (R-GIRO) Project:

<http://www.ritsumei.ac.jp/eng/html/research/>

and the Grant-in-Aid for Scientific Research on Innovative Area, "Bulk Nanostructured Metals", through MEXT, Japan:

<http://www.bnm.mtl.kyoto-u.ac.jp/>

Read more about Ritsumeikan University



Visit us !

For detailed information about location, venue, accommodation, general schedule, registration, proper abstract submission, manuscripts & posters, exhibition, conference guide advertisement, social/cultural program, travel, history review and downloads, please refer to the website.

More information please find here [OZ-website](#) or call us at +49-2762-97560 and refer to OZ-20

If you don't want to receive further information about OZ-20, please click [here](#).