

Information and Preliminary Program of the 2nd “Stakeholder Meeting” of the Horizon2020 Project “Flintstone 2020”, 04.-05. June 2019 in Freiberg

This stakeholder workshop is part of a bigger conference, the ‘70. BHT – FREIBERGER UNIVERSITÄTSFORUM’, which takes place on the following two days (5.-7. June 2019).

Title:

„BHT-Satellite Symposium: c-BN- and diamond based hard materials for metal and rock cutting – 2nd Flintstone2020 stakeholder meeting and 2nd Freiberg High Pressure Symposium“

Venue: ‘Alte Mensa’, Petersstraße 5, 09599 Freiberg (Germany)

Internet: <https://tu-freiberg.de/bht/programm#FK10>

Short description:

The Freiberg High-Pressure Research Centre (FHP) kindly invites delegates from industry, academia and politics to this satellite symposium of the annual BHT conference at TU Bergakademie Freiberg. The one-day symposium is focused on recent results and developments in high-pressure synthesis and industrial production of novel (super)hard materials based on c-BN and diamond, which can replace WC/Co-materials in metal and rock cutting applications, in order to reduce the use of the critical raw materials tungsten and cobalt. It will address topics on precursor-derived synthesis and sintering of (nano-scaled) cBN- and diamond-materials, but also on related new hard materials systems. The symposium will include talks and poster presentations covering topics from basic research to industrial applications including a focus on sustainability issues and economic implications.

The format of the meeting is planned to be based on 16 oral presentations (20 min plus 5 min discussion) and a poster session.

Tuesday, 04th June 2019

- 13:00 **Welcome and opening remarks** (host, representative of TUBAF, F2020 coordinator)
- 13:15 - 15:00 **Four 25 min talks** by F2020 partners and eventually comments on H2020 by a EU representative, or CRMs – an overview; J.E. Stahl: Motivation & overview; E6: economic aspects; Seco and/or Sandvik: Applications.
- 15:00 - 15:30 **Coffee brake**
- 15:30 - 17:15 **Four 25 min talks** by guests from academia and industry, maybe: guest from Dresden on cBN powders (synth. & applications); guest from TU Dresden: use of cBN; company: diamond tools; ISM: general and F2020 results.
- 17:15 **Poster session, discussions and coffee**
- 19:00 **Dinner**
- 20:00 **Evening program** (castle sightseeing, mineral collections, optional)

Wednesday, 05th June 2019

- 09:00 - 10:40 **Four 25 min talks** by F2020 partners and guests continued: CNRS: Novel B-based superhard materials; Novel HP/HT synthesis developments; Lund: cutting test results and performance; guests (e.g. Materials for the deep-drilling technology).

10:40 - 11:00 **Coffee brake**
11:00 - 12:40 **Four 25 min talks** by F2020 partners and guests continued: bifa: LCA sustainability aspects etc., Large scale synthesis of ultra-hard nitrides and related materials; guests (potential topics: Superhard materials industry in Asia; future developments in Europe).
12:40 **Concluding remarks**
12:45 **Lunch**
14:00 **Departure**

Optional social program

2h or 4h organized tours in the teaching and research mine "Reiche Zeche" (only by registration!)

Cathedral sightseeing (every day at 10:00, 11:00, 14:00, 15:00, 16:00)

Main mineral collection 'terra mineralia'

City tour (by appointment)

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