

First circular for the international symposium in Matsuyama on:

Science and Technology of Nano-Polycrystalline Diamond 2019 (STNPD-2019)

20 November 2018

Scope: Since the first report of synthesis of ultra-hard nano-polycrystalline diamond (NPD) in 2003 by the Geodynamics Research Center (GRC) of Ehime University, efforts have been made to apply this novel material to cutting-edge high-pressure researches in geoscience, physics, chemistry, materials science, etc., through a number of inter-laboratory collaborations with the GRC. We will have an international symposium on the synthesis, physical properties, and applications of NPD and relevant materials for further development of science and technology in high-pressure and related research fields, as well as for promotion of research collaborations using NPD. We invite not only the NPD users but also those who are interested in using NPD for their individual studies to this first international symposium on science and technology of NPD to be held at the GRC in Matsuyama, where it was born. This symposium is supported by the Joint Usage/Research Center program (“PRIUS”) run by the GRC and the Grant-in-aid for Scientific Research in Innovative Areas (“Interaction and Coevolution of the Core and Mantle”).

Venue: Geodynamics Research Center, Ehime University, Matsuyama, Japan
(20 min. from Matsuyama airport by taxi or 40 min. by bus + tram)

Date: 28 February - 2 March 2019 (subsequent to the PRIUS symposium, mostly given in Japanese, 27-28 February)

Deadlines for contributed papers/posters and registration: 15 December 2018

Registration fee: free of charge

Banquet: 5000 yen (on-site payment at the registration desk, cash only)

Unofficial Dinner: “Oidenka” near Ohkaido, on-site payment

Excursion to Uchiko-town: 5000 yen (on-site payment at the registration desk, cash only; including bus fair, lunch, drink)

Presentation: basically all speakers are invited (30 minutes for keynote and 20 minutes for other invited papers), but some slots for oral presentations

and poster presentations are available for contributed speakers. Posters will be displayed throughout the whole symposium with the core session during the lunch time of 1 March.

Accommodation: Many hotels are located in walking distance (15-20 minutes) from the GRC in the famous Dogo onsen area and the Ohkaido downtown area. We already reserved single-bed rooms from 27 Feb. to 3 March for 4 nights at Daiwa Roynet Hotel (<https://www.daiwaroynet.jp/matsuyama/>) near the entrance of Ohkaido for only invited speakers.

Organizing Committee: Tetsuo Irifune (Chair), Hiroaki Ohfuji, Yoshio Kono, Fumitaro Ishikawa, Takeshi Sakai, Masayuki Nishi, Toru Shinmei, Akira Yamada (GRC members).

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Tentative program

[28 February]

13:30-15:20

1. Synthesis of NPD and related materials

Keynote: Irifune

Invited: Gaida, Nishi, Nishiyama

15:20-15:40

Break

15:40-17:30

2. Features and physical properties

Keynote: Wang

Invited: Mashimo, Ishikawa, Rosa, Ohfuji

17:30-18:20

Lab tour

18:30-20:30

Banquet: University cafeteria

[1 March]

8:30-10:00

3. Applications to ultrahigh pressure generation

Keynote: Yagi

Invited: Occelli, Shimizu, Sakai

10:00-10:20

Break

10:20-12:10

4. Applications to X-ray spectroscopy under pressure

Keynote: Pascarelli

Invited: Ishimatsu, Morard, Wilke, Sanloup

12:10-13:10

Poster Core Session/Lunch (lunch box will be supplied)

13:10-15:00

5. Applications to other high-pressure studies

Keynote: Takano

Invited: Xie, Fukui, Yamamoto, Louvel

15:00-18:30

A visit to Matsuyama castle (20-30 minute-walking from GRC)

19:00-

Unofficial dinner: “Oidenka”, serving local cuisine of Ehime (in the Daiwa Roynet Hotel), 3000-5000 yen, depending what you eat/drink. We will book 20-30 seats.

[2 March]

8:30-10:20

6. New ideas and various applications

Keynote: Kono

Invited: Ozaki, Kumar, Kawaguchi

10:20-10:40

Break

10:40-12:00

7. Discussion & future perspectives

Some contributed speakers + free discussion

12:30-17:30

Excursion to Uchiko town: historical town in Edo era (some 200 years ago), about one hour from Matsuyama by a chartered bus (lunch box + drink will be served)

17:30-

You are free