

International Symposium for the Innovation of Crystal Growth Science and Engineering-1

Organizer: [New Crystal Growth Group in the Department of Applied Chemistry, Faculty of engineering, Yamaguchi University](#)

Organizing committee: Harutoshi Asakawa (Yamaguchi Univ.); Hiroyasu Katsuno (Kanazawa Univ.); Takao Inoue (Yamaguchi Univ.)

Collaboration: [Crystal Growth Fundamentals and Evaluation Division in JACG \(the Japanese Association for Crystal Growth\)](#)

Presentation: Hybrid system (Zoom only for the speakers)

Place for the talks in person: D12 room in the Faculty of Engineering, Yamaguchi University

(**Plenary**: talk 40 min + discussion 10 min; **Invited**: talk 30 min + discussion 10min; **General**: talk 15 min + discussion 5 min)

3/25 (Wed.)

Japanese Session (slides in English) Chairman: Harutoshi Asakawa (Yamaguchi Univ. Japan)

13:25 (**Japan Time**): Opening (Harutoshi Asakawa)

13:30: Harutoshi Asakawa (Yamaguchi Univ. Japan): Crystal growth of rochelle salt near the Curie point

13:50: Hiroyasu Katsuno (Kanazawa Univ. Japan) : Conversion of stable crystals into metastable crystals in a solution

14:10: Coffee break

14:30: Hiroko Yokota (Institute of Science Tokyo) (**Invited talk**) : Investigation of domain boundaries by second harmonic generation microscopy

15:10: Kensaku Maeda (Japan Advanced Institute of Science and Technology) (**Invited talk**) : Twin Boundary Formation in Lithium Tetraborate

15:50 : Motoi Yamashita (Chiba Institute of Technology) (**Invited talk**) :Phase transition behavior of tridecane, pentadecane, and heptadecane under high pressure

16:30: Shun Dekura (Tohoku University) (**Invited talk via zoom**) :Developments of functionalities based on the dynamics of protons and molecules in molecular assemblies

17:10: Takao Inoue (Yamaguchi Univ. Japan) : Bench-Top Evaluation of an Endothermic Reaction-Based Chemical Cooling Device: Mapping Temperature and Pressure Responses as a Function of Flow Rate

17:30: close

Move to Japanese Sake Restaurant Ochacha: お茶々

19:00: Social gathering

3/26(Thu.)

Japanese Session (slides in English) Chairman: Harutoshi Asakawa (Yamaguchi Univ. Japan)

10:00 **(Japan Time)**: Harutoshi Asakawa (Yamaguchi Univ. Japan): Development of laser-confocal microscopy combined with differential interference microscopy further combined with phase-shift interferometry

10:20: Tetsuro Katayama (Institute of pLED photonics, Tokushima Univ.) **(Invited talk)**: Ultrafast emission dynamic in a lead halide perovskite crystal systems by femtosecond transient absorption microscopy

11:00 : Takuma Sugi (Hiroshima Univ.) **(Invited talk via zoom)** : Computational 4D imaging toward understanding pain-information processing mechanism

11:40 : Lunch time

13:00 : Yuki Kimura (Hokkaido Univ.) **(Invited talk)** : In-situ experiments to understand early stages of crystallization

13:40 : Yoshiko Okamura(Hiroshima Univ.) **(Invited talk)** : Biomineralization in Bacteria

14:20 : Haruhiko Koizumi (Hiroshima Univ.) **(Invited talk)** : Structural Origins of Oleogel Elasticity: Lipid Whisker Networks and Population Redistribution of Lamellar Periodicities

15:00 : Satoshi Uda (Tohoku Univ.) **(Plenary talk)** : Understanding the μ -PD Growth Method: Key Concepts and Mechanisms

15:50 : Katsuo Tsukamoto (Tohoku Univ.) **(Plenary talk)** : Crystal Growth: Beyond What We Think We Know

16:40 : Coffee break

16:50 : Naoki Noguchi (Tokushima Univ.) **(Invited talk via zoom)** : Amorphous Clathrate Hydrate: A Snapshot of an Aqueous Solution?

17:30 : Coffee break

English Session (via Zoom)

Chairman: Harutoshi Asakawa (Yamaguchi Univ. Japan)

17:40 **(Japan Time) 9:40 (Spain time)**: Carlos Pimentel (Departamento de Mineralogía y Petrología, Universidad Complutense de Madrid) **(Plenary talk via zoom)** : Shedding new light on the dolomite problem through experimentation with analogous phases **(Cancel)**

18:30 **(Japan Time) 9:30 (Spain time)** : Move to Cafe bar Pole-pole:ポレポレ

19:00 **(Japan Time) 10:00 (Spain time)** : Social gathering

3/27(Fri.)

Japanese Session (slides in English) Chairman: Harutoshi Asakawa (Yamaguchi Univ. Japan)

9:30 : Hitoshi Miura (Nagoya City Univ.) **(Invited talk)** : Mechanism of periodic structure formation in minerals: Impurity effects on crystal growth

10:10 : Masao Sorai (Advanced Industrial Science and Technology) **(Invited talk)** : Carbonate formation in geological CO₂ storage

11:00 : Harutoshi Asakawa (Yamaguchi Univ. Japan): Challenges to super fast carbonation utilizing supercritical fluid

12:00 : Closing