

## 第4回国際ホソカワ粉体工学シンポジウムをドイツで開催

### 4th International Hosokawa Powder Technology Symposium Held in Germany

9月14日「第4回国際ホソカワ粉体工学シンポジウム」が、ホソカワ粉体工学振興財団による主催、当財団が発行している学術誌 KONA 誌の欧州・アフリカブロックの事務局である KONA Europe e.V. 並びにホソカワアルピネ AG 社の共催・後援により、ドリント アンデル コンgressホール ホテル（ドイツのアウクスブルク市）にて開催されました。

国際ホソカワ粉体工学シンポジウムは、当財団 20 周年を記念して 2014 年にホソカワアルピネ社にて第 1 回が開催され、その後 2017 年にアメリカ、2019 年に中国で開催され今回は第 4 回目の開催と成りました。

講演冒頭、当ホソカワ粉体工学振興財団理事であり、ホソカワミクロン社代表取締役 細川晃平社長よりのウェルカムスピーチから始まり、「機能性粒子の持続可能な生産」をテーマとして、学術研究者による概説と共に様々な企業とのコラボレーションによる 8 件の講演が行われました。

講演では、昨今話題と成っている細胞培地の連続生産設備による培養肉生産の将来性や、大豆タンパク質からプロテインを効率的に抽出する乾式・湿式技術の紹介、リチウムイオン電池のリサイクル技術

On September 14th, the 4th International Hosokawa Powder Technology Symposium took place at the Dorint An der Kongresshalle Hotel in Augsburg, Germany. The symposium was organized by the Hosokawa Powder Technology Foundation, in conjunction with KONA Europe e.V., the European / African Editorial Board of the academic journal KONA, and was co-hosted and sponsored by Hosokawa Alpine AG.

The International Hosokawa Powder Technology Symposium was first held in 2014 at Hosokawa Alpine AG to celebrate the 20th anniversary of the Foundation. Subsequent symposia took place in the United States in 2017 and China in 2019, making this the fourth edition of the event.

The symposium began with a welcome speech by Kohei Hosokawa, Director of Hosokawa Powder Technology Foundation and President of Hosokawa Micron Corporation. The theme of the symposium was “Sustainable Production of Functional Particles,” and it featured eight presentations highlighting collaborations between various companies, as well as the overviews by the academic researchers.

In the presentations, hot topics such as the future prospects of cultured meat production using continuous production facilities for cell culture media, dry and wet technology for efficient extraction of proteins from soybean protein, recycling technology and equipment for lithium-ion batteries, the relationship between processing techniques for rare



細川晃平社長のウェルカムスピーチ  
Welcome Speech by President Kohei Hosokawa



講演会風景  
Lecture Scenery

と設備の紹介、レアアースの加工技術とネオジウム磁石の性能との関係、二次電池材料として重要なグラファイトの新しい球形化設備の紹介並びに、日本のホソカワミクロン社の渡邊晃技術開発部長による、日本とドイツとの地政学的並びに文化的違いによる考え方の違いと日本での二次電池材料製造設備の変遷についての考察が紹介され、講演はホソカワアルピネ AG 社フェルナンデス社長による閉会挨拶で終了した。今回の講演会には、主催地のドイツを始めとして、オランダ・リトアニア等様々な国から参加者が来場され、講演会前日に開催された歓迎セレモニーでは、顧客よりの様々な要望に応える事が出来るホソカワアルピネ AG 社のテストセンターと、生産ラインをアプリケーション別に効率良く整備された工場の見学が行われ、その後アウクスブルク市内ツアーとドイツビール工場に隣接しているビアホールでドイツビールを堪能しながら、国際交流がはかられました。

earth materials and the performance of neodymium magnets, and the introduction of new spheronization equipment for graphite, a critical secondary battery material, were discussed.

Additionally, Dr. Akira Watanabe, General Manager of the Technology Development Department of Hosokawa Micron Corporation in Japan, shared insights into the differences in geopolitical and cultural perspectives between Japan and Germany, and the evolution of secondary battery material manufacturing equipment in Japan. At the end of the symposium, Mr. Fernandez, President of Hosokawa Alpine AG, gave closing remarks.

This event drew participants from various countries, including the host country Germany, the Netherlands, and Lithuania. A welcome ceremony held the day before the symposium allowed attendees to visit Hosokawa Alpine AG's test center, which can meet a variety of customer demands, and a factory that efficiently organizes production lines by application. Afterwards, the participants went on a city tour of Augsburg, and enjoyed international networking opportunities while savoring German beer at a beer hall adjacent to a German brewery in Augsburg.



渡邊晃技術開発部長の講演風景  
Lecture by Dr. Akira Watanabe, General Manager of Technical Development Dept.



休憩風景  
Coffee Break



アウクスブルク（ドイツ）市街風景  
Augsburg/Germany Cityscape



懇親ディナー風景  
Get-Together Dinner Scenery





# Hosokawa Powder Technology Foundation (HPTF)

4<sup>th</sup> International  
Hosokawa Powder  
Technology Symposium

## SUSTAINABLE PRODUCTION OF FUNCTIONAL PARTICLES



### Day 1 | 13.09.2023

13:00	Arrival at HOSOKAWA ALPINE
14:00 – 15:30	<b>GUIDED TOUR OF HOSOKAWA ALPINE. TEST CENTER, MANUFACTURING &amp; ASSEMBLY IN GROUPS</b>
16:00 – 17:00	<b>GUIDED AUGSBURG CITY TOUR OR RIEGELE BREWERY TOUR</b>
17:30 – 21:00	<b>GET TOGETHER DINNER AT RIEGELE AUGSBURG</b>
21:00	Bus shuttle leaving to Dorint Hotel and HOSOKAWA ALPINE

### 4<sup>TH</sup> INTERNATIONAL HOSOKAWA POWDER TECHNOLOGY SYMPOSIUM

Venues of our event:

#### Conference Venue 14.09.2023

Dorint Hotel An der Kongresshalle  
Imhofstraße 12  
86159 Augsburg

#### Dinner location 13.09.2023

Riegele WirtsHaus  
Frölichstraße 26  
86150 Augsburg

#### Parking:

Peter-Doerfler Str. 27  
Junction Peter-Doerfler Str. and Depotstraße

HOSOKAWA ALPINE AG  
Peter-Doerfler-Str. 13 - 25  
86199 Augsburg

#### Contact us:

[marketing@alpine.hosokawa.com](mailto:marketing@alpine.hosokawa.com)  
<https://www.hosokawa-alpine.com/powdersymposium/#c15834>

### Day 2 | 14.09.2023

08:30	Registration & Welcoming
09:00	<b>WELCOME SPEECH</b> Speaker: K. Hosokawa (President Hosokawa Micron Group)
09:20 – 10:00	<b>CURRENT TRENDS IN PARTICLE TECHNOLOGY</b> Speaker: G. Meesters (TU Delft)
10:00 – 10:40	<b>LEVERAGING AI IN PROCESS ENGINEERING: OVERVIEW OF MULTIFACETED APPLICATIONS AND SYNERGETIC INTEGRATION OPPORTUNITIES</b> Speaker: C. Thon (TU Braunschweig)
Coffee break	
11:00 – 11:40	<b>THE FUTURE OF CULTIVATED MEAT AND THE CONTINUOUS PRODUCTION OF CELL CULTURE MEDIA</b> Speaker: A. Kodira (JSBio/Kcell), H. Schmidt (Hosokawa Alpine)
11:40 – 12:20	<b>DEEP DIVE PULSES PROTEIN – COMBINATION OF DRY AND WET EXTRACTION</b> Speaker: R. Kriech (Bühler), E. Emmert (Hosokawa Alpine)
Lunch break	
13:30 – 14:10	<b>THE DIFFERENCE BETWEEN GERMANY AND JAPAN FROM THE VIEWPOINT OF THE POWDER-RELATED INDUSTRY, AND SDGs</b> Speaker: A. Watanabe (Hosokawa Micron)
14:10 – 14:50	<b>PROCESSING TECHNIQUES FOR RARE EARTH MATERIALS AND THE EFFECT ON MAGNETIC MATERIALS PERFORMANCE</b> Speaker: K. Opelt (Fraunhofer IWKS)
Coffee break	
15:10 – 15:50	<b>COMMINUTION AND CLASSIFICATION AS IMPORTANT PROCESSES FOR THE CIRCULAR PRODUCTION OF LITHIUM BATTERIES</b> Speaker: C. Schilde (TU Braunschweig)
15:50 – 16:30	<b>SPHERONIZATION OF NATURAL GRAPHITE – BACKGROUND AND NOVEL PROCESS</b> Speaker: M. Mancini (ZWS Ulm), B. Biber (Hosokawa Alpine)
16:30	<b>CLOSING REMARKS</b> Speaker: A. Fernández (President Hosokawa Alpine)
End of official part and social gathering	