# 発表者プロフィール / Presenter Profile

|          | 名前                     |   |
|----------|------------------------|---|
|          | Name                   | Tony Z Jia  |
|          | 所属大学/所属機関              |   |
| 写真/Photo | University/Affiliation | Earth-Life Science Institute, Tokyo Institute of Technology<br>Blue Marble Space Institute of Science |

| 発表テーマ/<br>Presentation Topic      | Membraneless Protocells at the Origins of Life   |  |
|-----------------------------------|--|--|
| 発表のポイント/<br>Point of Presentation | Polyesters could have been synthesized on early Earth through simple<br>dehydration of alpha hydroxy acid (AHA) monomers; further rehydration results<br>in assembly into membraneless droplets proposed to be protocell models. Here,<br>we introduce our research on the relevance of polyester microdroplets to the<br>origisn of life. |  |

### プロフィール Profile

#### 自己紹介/Self-introduction

After his undergraduate research at Caltech involving chloroplast proteins and pulmonary surfactant lipids, and his PhD research on RNA sequencing and non-enzymatic polymerization, as well as coacervates, Tony joined the Earth-Life Science Institute (ELSI) at Tokyo Institute of Technology in 2017 to research various topics in the origins of life. Since 2019, Tony has also been a member of Blue Marble Space Institute of Technology, where he is currently a Research Investigator. In 2022, Tony opened a new lab at ELSI as an Associate PI.

### **研究分野について/About study field**

Tony's research is at the interface of a number of disciplines, including chemistry, biology, geosciences, and materials sciences, among others, all to answer important questions related to the origins of life and astrobiology. Both of these fields seek to answer questions related to the origin and evolution of planets, Earth, and life on Earth, and to that end, require interdisciplinary collaborations. In Asia, these fields are still growing fields, and interdisciplinary educational programs and research will be driven by young researchers in the future.

## 視聴者へのメッセージ Message to audience

Hopefully you find that origins of life and astrobiology are both interesting research topics! If you have interest in working or collaborating with us, please contact us anytime! Please look forward to more and more opportunities to participate in astrobiology and origins of life-related educational and research opportunities in the near future! We hope that these fields spread far and wide across Asia in the near future!