

TITLE - "Toward Infinite Origami Materials" Date: 31st October 2023 **Venue:** Online mode

Resource Persons: **Prof. Bungo Ochiai,** *Department of Chemistry and Chemical Engineering, Yamagata University, Japan*

The Department of Sciences, Program - Chemistry, Manav Rachna University organized an International Webinar on Toward Infinite Origami Materials on October 31, 2023, by Prof. Bungo Ochiai, Department of Chemistry and Chemical Engineering, Yamagata University, Japan. He has over 25 years of experience in the field of polymer synthesis. Currently working as Vice-Dean (education), Faculty of Engineering, Yamagata University. He completed his Doctor of Engineering in March 2001 from the Interdisciplinary Graduate School of Science and Engineering, Tokyo Institute of Technology, Japan. He is an active member of the Chemical Society of Japan, Society of Polymer Science Japan, and American Chemical Society etc. Professor Bungo OCHIAI More than 127 research papers published in peer-reviewed Journals and conferences, Wrote Book Chapters Polymer Chemistry.

The session was started on time by Ms. Aanchal, an MSc Chemistry III SEM student giving the highlights of the webinar with a welcome note. Dr. Arpit Sand, Program Head-Chemistry introduced the guest speaker to the audience and gave highlights of the webinar. In the talk, Prof. Bungo Ochiai gave information about his polymeric material that

has properties like Dynamic mechanical nature and shape memory for origami. The video shown at the start of the webinar increased the curiosity and interest among the students. Then Prof explained the design of such material and the ways of polymerization, single-step copolymerization, and polymerization of 19-membered ring polymers using polyethylene glycol. He also gave information on characterizing the materials using different techniques especially NMR, evaluation of inclusion behavior, comparison of the effects of thermal & photocuring, and experiments with results related to the evaluation of properties of the polymeric material as an option for infinite origami material. At the end of his presentation, Prof. Bungo Ochiai answered more clearly the questions asked by the participants in the chat box. At the end of the session, a memento was given to Prof. Bungo Ochiai as a token of appreciation after the thanks note by Dr. A. Jayamani.

The talk enriched the UG, PG students, research scholars, and faculty members with interesting polymeric material that could be more innovative as origami material. More than 50 participants from different institutions participated in the webinar with more interaction with the speaker.