



PPS Newsletter

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May 2022

Information to Polymer Processing Society Members

Successful hybrid PPS-37 International Conference, April 11-15, 2022, held in Fukuoka, Japan

The PPS-37 International Conference of PPS was successfully held in Fukuoka, Kyushu Island, Japan, on April 11-15, 2022 (website <http://www.pps-37.org/>). The Conference was organized by Prof. Toshihisa Kajiwara of Kyushu University and his team. The Conference was a hybrid one (on-site and on-line) due to the severe virus pandemic COVID-19.

The Conference was a hybrid type, having both online participants and in-person ones. It took place at the superb Fukuoka International Congress Centre for the live participation and via zoom technology for the online participants. They were 401 presentations, 7 plenary lectures, 57 keynote lectures, 288 oral presentations and 49 posters. 418 people were registered. There were 7 parallel sessions. Only Japanese (about 120) participated in-person. Delegates from other countries (about 300) participated online.

The general symposia were: Injection Molding, Extrusion and Coating, Blow Molding, Thermoforming and Rotomolding, Polymerization and Synthesis, Polymer Blends and Alloys, Polymer Composites, Nanocomposites and Nanotechnology, Films and Fibers, Mixing and Compounding, Modeling and Simulation, Monitoring and Characterization, Rheology and Rheometry, Polymer Foams, Morphology and Structural Development, Rubber and Elastomers, Reactive Processing, Additive Manufacturing (3D-Printing);

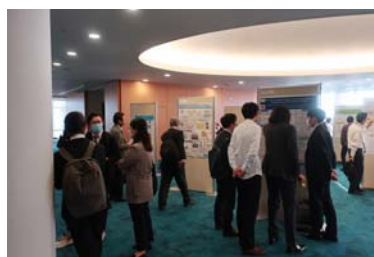
The special symposia were: Biopolymers, Eco-friendly Polymers and Recycling, Micro/Nanotechnology, Molds, Polymers for Medical Applications, Polymers for Automobiles, Polymers for Music, Culture, and Sports, Polymers for High-Pressure Hydrogen, and Honorary Session for Takeshi Kikutani.



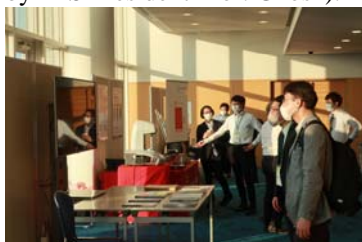
Opening Ceremony of PPS-37 International Conference (address by PPS President Prof. Ghosh).



Plenary lecture by Prof. Kozo Ito.



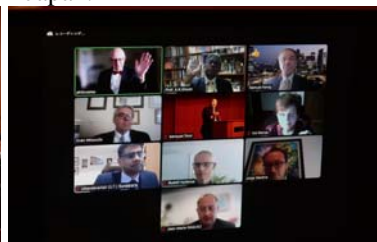
Poster Session at the International Congress Centre in Fukuoka, Japan.



Exhibition of PPS-37 International Conference.



Banquet at the International Conference Centre.



Award ceremony and announcement of the next PPS.



Cartagena, Colombia, the place for PPS-39 International Conference.



Cartagena's walled city and fortress were designated a UNESCO World Heritage Site.



A view of one of the many catholic churches in Cartagena.

Joint IKV/PPS Symposium on Plastics Technology, September 5-6, 2022, to be held in Aachen, Germany

There is going to be a joint IKV/PPS symposium on Plastics Technology to be held on September 5-6, 2022 in Aachen, Germany. The website is:

<https://www.ikv-aachen.de/en/events/symposium-plastics-technology/>

This is the 2nd symposium on polymer technology organized by Prof. Christian Hopmann and his team at IKV. The 1st one was held online on September 8-12, 2020, had 110 participants, 36 conference talks, from 11 nations.

The fees are for PPS members €110 (include a \$110 fee for membership to PPS) and for students are €245 (include a \$25 fee for membership to PPS).

Several PPS International Representatives will participate in the Scientific Committee.

The Proceedings of the Symposium will be published.



The Eurogress Convention Center in Aachen, Germany, where the IKV/PPS symposium will take place in September 5-6, 2022.



The area in Aachen, Germany, where the symposium will take place.



Centre Charlemagne - 15 min walk from the Conference Hotel.

Upcoming Conferences of Interest to PPS Members

19th U.S. National Congress on Theoretical and Applied Mechanics

June 19-24, 2022, Austin, Texas, USA

Abstract submission for the 19th U.S. National Congress on Theoretical and Applied Mechanics is now open!

10th Hellenic Society of Rheology Conference

The 10th Hellenic Society of Rheology Conference will be held from **June 29 to July 2, 2022** in the island of Skiathos (the venue will be the Skiathos Palace Hotel) jointly organized by the University of Thessaly and the University of Cyprus.

Professor Marrucci from the University of Naples will be the honored guest speaker, and plenary lectures will be given by Prof. Martin Bazant (MIT) www.mit.edu/~bazant and Prof. Evan Mitsoulis (NTUA) <http://old-2017.metal.ntua.gr/index.pl/mitsoulis>. For additional and updated information please follow the link: <http://hsr2021.uth.gr/index.php/en/>

Nordic Rheology Conference 2022

The Nordic Rheology Conference 2022 will take place in Reykjavik, Iceland on **August 8-10**.

There will also be a rheology short course prior to the conference.

Please follow the NRC 2022 website (<https://nordicrheologysociety.org/Home/Nrc>) as well as the [‘Rheology forum’ LinkedIn group](#) and [‘Rheology’ Facebook group](#) for up to date information.

SPE:

Society of Plastics Engineers

ANTEC 2022

Charlotte, NC, USA, **June 14-15, 2022**

<https://www.4spe.org/i4a/pages/index.cfm?pageid=6912>

Lambla Award winner for 2022 is Jean-Marie Raquez of the University of Mons, Mons, Belgium

The Lambla Award was given at PPS-37 in Fukuoka, Japan, to Prof. Jean-Marie Raquez.



Prof. Jean-Marie Raquez, PhD in Polymer Science, is the head of Laboratory Polymeric and Composite Materials at University of Mons (Belgium) as well as an R&D Leader at the research center Materia Nova (Mons, Belgium). His research activities encompass all the general aspects about the realm of “bioplastics”, i.e., bio-based and/or biodegradable polymer materials, particularly ranging from their controlled and catalyzed polymerization reactions, production of high performances nanocomposites / nano-hybrids via reactive processing (i.e., reactive extrusion and additive manufacturing), to their implementation into diverse applications (packaging, textile, automotive, etc.), including their end-life scenario.

Prof. Jean-Marie Raquez is also in charge of national and international research programs (Région Wallonne, EU-FP7, EU-H2020), including several industrial collaborations. He has more than about 170 publications in international peer-reviewed journals, 48 personal communications at conferences and is co-inventor of 9 patents. He co-edited 2 books and has written 11 chapters in books.

Early Career Award for 2022 goes to Prof. Weinun Xu of the University of Akron, Akron, Ohio, USA

The Early Career Award was given at PPS-37 in Fukuoka, Japan, to Prof. Weinun Xu.



Dr. Weinun Xu joined the School of Polymer Science and Polymer Engineering at the University of Akron as an Assistant Professor in 2019. He received his bachelor's degree in Polymer Materials and Engineering from Donghua University in 2011, and his Ph.D. degree in Materials Science and Engineering from Georgia Institute of Technology in 2015. His graduate research focused on stimuli-responsive polymers with branched architectures and their controlled assembly. He then conducted postdoctoral research (2016-2019) in the Department of Chemical & Biomolecular Engineering at Johns Hopkins University. His postdoctoral research focused on the creation of atomically thin 3D micro/nanostructures from 2D layered materials for biomedical applications.

The current research in Dr. Xu's group at the University of Akron focuses on the development of advanced hybrid materials and new 3D fabrication technologies across a wide range of length scales. He has over 30 publications in journals such as Science Advances, Nano Letters, and Angewandte Chemie, with over 1500 citations. Dr. Xu has been recognized with several awards, including Excellence in Graduate Polymer Research Award from the American Chemical Society, Best Ph.D. Thesis Award from Sigma Xi and Georgia Tech, 2021 IUPAC Young Observer Award, and the 2022 PPS Early Career Award.

Prof. Phil Coates, University of Bradford, UK, Elected PPS Fellow for 2022

Phil Coates elected PPS Fellow for 2022.



Prof. Coates has exploited solid phase processing of polymers (at temperatures above T_g but below T_m), to attain stable, molecularly oriented structures with significant, controlled improvement in modulus, tensile strength, thermal conductivity, creep resistance, impact resistance, diffusion behaviour and drug elution. His work from the 1970s, when he invented the polymer die-drawing process, to the present has established the excellent team in the Polymer IRC at Bradford as the leaders

in solid-phase polymer orientation with extensive journal publications, the research book in this area (PPS series), a range of patents with collaborators, and a large industrial and government research contract portfolio.

His research has developed fundamental understanding of the mechanics of solid-phase deformation behaviour of polymers, with new constitutive relationships and physical modelling used to achieve molecular-related understanding of deformation and feed computer modelling and control of structure. This has underpinned inventive steps in the design and implementation of batch and continuous processes, and these die-drawing process technologies have been transferred to industry at both large and small scales, and also to academy, the latter via Royal Society Newton support for in-situ x-ray beam line studies of die drawing structure development in a joint international research laboratory in Changchun, China. This forms part of the highly successful Science Bridges China (2009 on) advanced materials platform formed and led by Prof. Coates, with over 200 leading Chinese and UK academics.

Phil is a Fellow of the Royal Academy of Engineering and Fellow of the IMechE and IoMMM, winner of the Netlon Award, the Swinburne Award, the Tianfu Friendship Award and Sichuan International Science Cooperation Award. He is Chief Editor of the IoMMM international journal, *Plastics Rubber & Composites: Macromolecular Engineering*. In 2017 he was the James L. White Innovation Award Winner of PPS.

Prof. Sam Kenig, Shenkar College, Tel Aviv, Israel, Elected PPS Fellow for 2022

Sam Kenig elected PPS Fellow for 2022.



Samuel Kenig was educated in Israel and Canada. He received his B.Sc. in Chemical Engineering from the Israel Institute of Technology (IIT) in 1968 and his Ph.D. in Chemical Engineering in 1972 from McGill University, Montreal, Canada, both with Honors.

Following his Ph.D. studies Dr. Sam Kenig worked in the R&D laboratories of the Canadian Industries Ltd. in McMasterville, Quebec, from 1971 to 1974 and then from 1974 to 1991 in the research authority of the Israel MOD, where he was the Director of the Materials and Processes Division.

In 1992 he established the Israel Plastics and Rubber Center Ltd. where he served as the Managing Director till 2014.

In 1994 he established the Polymers and Plastics Engineering Department in Shenkar College and served as the department head till 2004. From 2004 to 2007 he was the head of the Chemical Engineering Department in Shenkar College and from 2007 he acts as the Dean of Engineering in Shenkar College and

head of the Graduate Studies in the Polymers and Plastics Department.

In 2013 he was nominated as the Chief Technology Officer (CTO) of Nantocleantech (NCT) and President of NCT Israel in 2016, where he developed the anti-corrosion paints and fire retardant additives.

Prof. Kenig is the author of more than 160 papers, 18 patents, 3 of them are related to anti-corrosion of metals and fire retardancy of plastics (allowed in 68 countries and pending in 49 countries).

Prof. Kenig recently edited the book, "Processing of polymer nanocomposites" which is part of the PPS series of Progress in Polymer Processing (PPP) published by Hanser.

He is a member of the International Committee of the PPS.

He is the 2016 winner of the SPE International Award and Fellow of the SPE since 2001. In 2019 he was the James L. White Innovation Award Winner of PPS.

Graduate and Young Research Travel Award Winners for 2022

AWARD - \$1500 USD travel award for graduate students and young researchers to travel to the PPS International Conference

- Graduate Travel Award Winners 2022
 - **Ms. Chhavi Verma** – IIT Roorkee, USA
 - **Ms. Elnaz Erfanian** – University of Calgary, Canada
 - **Ms. Sara Simon** – University of Wisconsin, USA
 - **Mr. Amir Ahmadian** – UBC Okanagan, Canada
- Young Research Travel Award Winners 2022
 - **Dr. Milad Kamkar** – University of British Columbia, Canada
 - **Dr. Mojtaba Mohammadi** – Ecole Polytechnique de Montreal, Canada

Next Newsletter – November 2022

If you have comments on how to improve this newsletter or want to share some information in the next one, please contact the Newsletter Editor Prof. Evan Mitsoulis at mitsouli@metal.ntua.gr. The next issue of the Newsletter is due in November 2022.