



PPS Newsletter

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May 2014

Information to Polymer Processing Society Members

The PPS-2013 Asia-Australia Conference, December 4-7, 2013 in Mumbai, India, a solid success

The Polymer Processing Society Asia/Australia Conference (PPS-2013) took place at Ramada Powai Hotel & Convention Centre, Mumbai, India, during December 4-7, 2013. It was organized by the Polymer Processing Academy in association with the Indian Institute of Technology-Bombay and the Indian Institute of Technology-Delhi. The Conference Chair, Prof. A.K. Ghosh, local organizing committee, and organizing team from IIT Delhi and IIT Mumbai made the Conference a great successful event, both in scientific and organizational terms. The inaugural event was held on 4th of December 2013 with Dr. R.A. Mashelkar as Chief Guest and Dr. Anil Kakodkar as Guest of Honour. The Technical Program Chair, Prof. Arup Bhattacharya, set up an excellent program with 230 registered participants from 10 countries. Over three days, there were 13 symposia, which included 6 plenary, 33 keynote/invited and 90 oral presentations from leading scientists and engineers. A special symposium in honor of Prof. Ashok Misra, named "Processing for Properties" and a Young Scientist Symposium were the highlights of the technical event. In the poster session, 41 posters were presented, and the three best student posters were recognized for their quality and innovation. On the second day of the conference, a banquet was held at Ramada Powai Hotel & Convention Centre. A cultural program included the famous Labani dance for the participants to experience Indian culture and goodwill. Future PPS events and poster awards were announced at the banquet. PPS-2013 provided a rich opportunity to interact with peers from all over the world in furthering their respective professional interests.



Prof. Titomanlio, President of PPS, delivering inaugural speech of PPS-2014 in Mumbai, India.



Release of Conference Proceedings at the inaugural program during PPS-2014 meeting in Mumbai, India.



Prof. Sati Bhattacharya delivering invited talk during PPS-2014 in Mumbai, India.



Prof. Anup Ghosh, local PPS-2014 Organizer, greets Profs. Kikutani and Titomanlio in the Plenary Session.



Prof. Volker Altstaedt delivering his invited talk during PPS-2014 in Mumbai, India.



Dr. Suprakash Sinha Ray evaluating poster session during PPS-2014 in Mumbai, India.

The PPS-30 International Conference, June 8-12, 2014 in Cleveland, Ohio, USA, is celebrating 30 years of PPS

The 2014 International Conference of PPS will take place in Cleveland, Ohio, USA on June 8-12 (website <http://www.pps30.com/>). The Conference venue is the Renaissance Hotel, which will guarantee a top modern and generous atmosphere. The hotel is centrally located in Cleveland, only steps away from Terminal Tower and Public Square, and with direct train access from Cleveland Hopkins International Airport. The PPS-30 Organizers, Profs. Sadhan Jana and Joao Maia, are putting in their best efforts to organize a memorable conference with scientific quality and a splendid social and cultural program.

PPS-30 promises to maintain a good balance of programs to serve the attendees from academia and industry. PPS-30 attendees will receive updates on conventional processing technologies and should be ready to embrace the discoveries of new materials and emerging nano- and micro-scale processes in the areas of flexible electronics, soft materials for implants, aerogels, and additive manufacturing.

The conference focuses on more than 15 technical topics and will host 6 plenary speakers, two award lectures, two honorary sessions, two memorial sessions, and at least 30 keynote lectures. Honorary sessions are scheduled for Han Meier, Don Paul. Memorial sessions are scheduled for the late Professors Xi Xu and Marino Xanthos.

The City of Cleveland is located on the southern side of Lake Erie. It was founded in 1796, has an area of 82.47 square miles, and has a metropolitan population of about 2 million. The full program and further information on all topics (hotel, travel, public transport) are available on (<http://www.pps30.com/>).



Map of USA, showing Cleveland, the site of PPS-30, which is located in Ohio State, northern USA.



The Cleveland skyline. The city offers exciting places and museums to visit.



The Renaissance Hotel, venue for PPS-30.

The PPS-2014 Europe-Africa Conference, October 19-23, 2014 in Tel Aviv, Israel, gets under way

The 2014 Europe-Africa Conference of PPS will take place in Tel Aviv, Israel, on October 19-23 (website <http://pps2014.org/>). The Conference venue is the David Intercontinental Hotel in Tel Aviv, right on the beach front of the Mediterranean, and it guarantees all the necessary details for a successful meeting. The venue is located only 13 km from the Ben Gurion International Airport. The PPS-2014 Organizer, Prof. Samuel Kenig, of the Shenkar College of Engineering and Design, is working very hard to make this event a truly memorable one. The scientific program includes plastics and polymers, polymer processing and rheology, smart and multifunctional polymers, bio-based and bio-degradable polymers, polymer nanomaterials and nanomanufacturing, polymer surfaces and interfaces, polymers for bio-medical and energy applications, and composites materials and processing, among others. The Conference will comprise of plenary, keynote, and regular symposia papers as well as posters. In addition, a special session honoring Prof. Zehev Tadmor will take place. Also special pre- and post-

conference tours will be organized for those participants who want to take the opportunity and visit such places as Jerusalem, the Dead Sea, and the many other attractions present in the Holy Land.



Tel Aviv and its exciting coastline in eastern Mediterranean is the site for the 2014 Europe-Africa Conference of PPS.



The conference venue for PPS-2014 is the David Intercontinental Hotel in Tel Aviv, Israel.

Future Meetings

In its continuing effort to be a truly international society, PPS strives to have meetings every year in different parts of the world. The following list of upcoming meetings is a good indication of these efforts.

2015 Meetings

International Conference (PPS-31), Jeju Island, KOREA, May
Conference Chair: Prof. J.K. Kim

Europe/Africa Conference PPS-2015, Graz, Austria, October
Conference Chair: Prof. Holzer

Other Meetings of Interest to PPS Members

2014

86th Annual Meeting of the Society of Rheology

October 5-9, Philadelphia, PA, USA

For information visit: <http://www.rheology.org>

Asian Workshop for Polymer Processing 2014

November 17-20, Kenting, Taiwan

For information visit: <http://www.awpp2014.tw/>

2015

87th Annual Meeting of the Society of Rheology

October 11-15, Baltimore, Maryland, USA

For information visit: <http://www.rheology.org>

AERC-2015, The European Rheology Conference

April 14-17, Nantes, FRANCE

For information visit: <http://rheology-ESR.net>

European ANTEC® Brussels 2015
September 3-4, Brussels, BELGIUM

For information visit: <http://www.4spe.org>

Lambla Award winner for 2014 is Liqun Zhang of a State Key Lab in Beijing, China



Prof. Liqun Zhang is the Lambla Award Winner of PPS for 2014. Prof. Liqun Zhang received his PhD degree in 1995 from Beijing University of Chemical Technology of China. He did research as a Visiting Scholar at University of Akron in 1999-2000, and as a Postdoctoral Fellow at Case Western Reserve University in 2000-2001. He was appointed as a Cheung Kong Scholar by Ministry of Education of China in 2005 and got the Distinguished Young Scientist Foundation from NSFC in 2007.

He has been very active in the research field of rubber science and technology for over 24 years since his undergraduate thesis in 1989 and has been leading the Center of Advanced Elastomer Materials, which holds a leading position in China in the field of rubber science and technology and possesses an internationally well recognized fame as well. He is also the head of the Key Lab. of Beijing City on Preparation and Processing of Novel Polymer

Materials and associate head of the State Key Lab of Organic-Inorganic Composites, China. He serves as an editorial board member of 3 international scientific journals and 9 Chinese scientific journals.

His current research interests include: (I) preparation and processing of advanced and novel rubber nanocomposites, (II) description of complex structures and the relationship between multi-scaled structures and performance of rubber composites by advanced simulation methodology and instruments, (III) design, synthesis and processing of new generation of biobased engineering elastomers, (IV) dynamic vulcanization and thermoplastic elastomers.

He has published over 295 international papers and is a (co-)author of 8 books (chapters). He has given over 60 plenary/keynote/invited lectures in international conferences and has chaired many sessions in international conferences and 4 times co-chaired international conferences. He has filed 130 Chinese patents and 3 international ones, of which nearly 100 have already approved.

He has received many highly reputed scientific awards from scientific associations/societies, the Ministry and Committee of China including prestigious “9th China Youth Scientific Award”, “China University Distinguished Youth Teacher Award”, “Award for Scientific and Technological Innovation of Ho Leung Ho Lee Foundation”, “Guanghua Engineering Science and Technology Award”, and “National Invention Award”. In 2012, he received Spark-Thomas Award from ACS Rubber Division and Asia Research Award from the Society of Chemical Engineering of Japan, for his important contributions to rubber science and technology.

JLWhite Innovation Award for 2014 goes to Heinz Gross of GERMANY



The winner of the James L. White Innovation Award for 2014 is Dr. Ing. Heinz Gross of Germany.

Dr. Gross was born in 1950 in Berlin, Germany. He studied mechanical engineering at the RWTH Aachen, Germany, with concentration on plastics processing. Passed his PhD in 1983 with Prof. Menges at the Institut für Kunststoffverarbeitung (IKV) in Aachen, Germany.

Thereafter he worked for Röhm GmbH as head of the R&D of extrusion processes and of extruded products. In 1990 he became head of R&D of the technical products group of Röhm. In 1993 he left Röhm and founded Gross Kunststoff-Verfahrenstechnik and focused on improving extrusion processes.

The main goal of his work is to find new technologies which help to improve the quality of extruded parts and in the same

time to reduce the production costs and ideally to facilitate extrusion processes.

He holds several patents protecting for instance his special Membrane-technology for slit dies and the Flex Ring- and Tilting-technology for annular dies. These technologies allow for a fine tuning of the flow channel geometry in the interior of extrusion dies in order to be able to further reduce thickness tolerances for instance in films, sheets or pipes.

The GWDS-technology, which is his youngest development, is a totally new philosophy to design dies for extrusion blow molding. It is an astonishing simple solution which enables to tailor the thickness of the parison in axial and also in circumferential direction in order to reach the wanted thickness distribution in the final blow molded parts.

In 1997 he additionally founded the Gross Messtechnik to develop new on-line measuring systems for the monitoring of important process parameters in extrusion lines. The realized bank measuring systems and a system to monitor the outer wall thicknesses of double-walled sheets are a precondition to establish a closed-loop control for important extrusion parameters, while operating dies with adjustable flow channels. The results of his work are published in over 200 technical papers and various international patents.

Prof. Rong Zheng passes away at 67



Rong Zheng was born in 1947 in China. He died in Melbourne, Australia, on Jan 7th 2014 after a stroke he suffered on Jan 3rd, 2014.

During the Cultural Revolution, Rong was sent to Buoy Hai Wan horse ranch, in 1968, in the far north of China for hard labour. In 1971 Rong was offered a teaching position at Qing Dao No. 50 High School. Rong had a solid knowledge of mathematics and physics. Not only was he familiar with the high school curriculum, he had taught himself university level maths and physics whilst at the ranch.

1977 saw the end of the Cultural Revolution. That year, universities started their first round of acceptance exams. Of six million high school graduates seeking a position, only 4% were accepted; fortunately Rong was among them. He entered South China University of Technology in Canton and completed his Masters in Engineering in 1985. Though allocated a position at the Chinese Centre for Chemical Science research, Rong decided to migrate to Australia.

Rong joined the rheology group at Sydney University which was led by Professors Roger Tanner and Nhan Phan-Thien. He rapidly showed that he could work independently at the highest level. One of us (Tanner) recalls, "... I asked him to investigate a mathematical problem on rolling sheets of plastic. He went away and I saw little of him for a couple of months. Then one day he came to my office with the complete solution of the problem! This was extraordinary, and I did not expect it. We published this work in our first paper in 1988, and thereafter he worked rapidly and well and did excellent work for his PhD".

He received his Ph.D. from Sydney University in 1993 and published 15 peer reviewed papers from 1987 to 1993. Not too bad for a Ph.D. candidate! But that was Rong. He never did less than his best.

In 1993, one of us (Kennedy) was lucky enough to employ Rong as a research engineer at Moldflow Pty. Ltd. At interview, Kennedy asked him, "Why would you leave a famous team at Sydney University to join Moldflow (a small software company)". Rong replied, "Here we write papers, I want my work to make a difference to the world". And indeed his work did. Rong contributed to many aspects of the Moldflow software; particularly, calculation of residual stresses, shrinkage and warpage, fibre orientation distributions, and non-isothermal crystallization under flow.

Rong leaves a considerable legacy for students and researchers. He published 2 books, 6 book chapters, 35 refereed scientific papers and numerous conference publications. This record is more impressive when you consider that confidentiality arrangements restricted his publishing whilst at Moldflow. Unknown to many of us, he was a "blogger" on philosophical issues on a Chinese website. His writings there have attracted over 600 thousand hits.

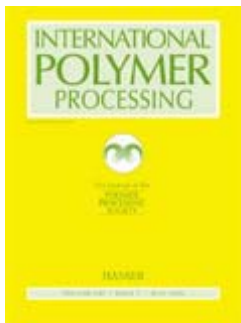
Rong was also passionate in his search for scientific correctness. Though retired and with his second book completed he had several communications with one of us (Phan-Thien), about the interpretation of stochastic equations related to fibers in a fluid. This continued until a few months before his untimely death.

Those who knew Rong personally will attest to his extreme modesty. That is not to say he was timid. He would challenge people on scientific issues, but without malice or intimidation. His manner always respected and maintained the dignity of the person he challenged and this made him popular with colleagues and the many students and researchers he related to in Moldflow's external research network.

Rong is survived by his wife Cai Xia, daughters Jina and Ying, and his grandson Mica. He will be sadly missed by his many friends in the fields of polymer processing and rheology.

(signed by Prof. Roger Tanner (Univ. of Sydney), Prof. Nhan Phan-Thien (National Univ. of Singapore), and Dr. Peter Kennedy (Helmet Investments Pty. Ltd.))

IPP Journal – All Previous Issues Now Available on Line



All issues of IPP from its inception in 1985 are now available on-line at <http://www.polymer-process.com>. To download papers from this site, use your PPS membership number. In response to PPS member requests, papers in IPP will now have a DOI number, as well as a Hanser document number, which allows quick access to a paper for the on-line journal website.

Next Newsletter – November 2014

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 2014.