

J. VLACHOPOULOS

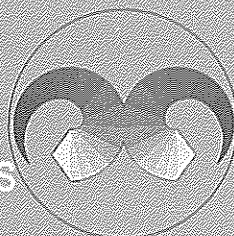
PPS-10

The Polymer Processing Society

Tenth Annual Meeting

Akron, Ohio

April 5-8, 1994



ABSTRACTS

SPONSORS

Dow Chemical Company

Monsanto Chemical Company

Institute of Polymer Engineering
The University of Akron

Quaker Square Hilton Hotel, Akron, Ohio U.S.A.

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Processing Society
Tenth Annual Meeting

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**QUAKER SQUARE HILTON HOTEL
AKRON, OHIO U.S.A**

University of Akron, Akron, Ohio U.S.A

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PPS-10 CONFERENCE COMMITTEE

Chairman J.L. White, IPE, University of Akron
Co-chairman A.I. Isayev, IPE, University of Akron

**Technical Program
Chair** M. Cakmak, IPE, University of Akron

Symposium Organizers J.F. Agassant, G. Campbell,
E. Canedo, J. Castro, A.Y. Coran,
J. Dealy, H.G. Fritz, G. Groeninckx,
H. Hamada, J.M. Haudin, K. Inoue,
T. Kanai, T. Kikutani, K. Koyama,
L.J. Lee, V. Nadkarni, N. Nakajima,
H. Potente, A.J. Ryan, M.E. Ryan,
Y. Saito, T. Sakai, J.E. Spruiell,
J.F. Stevenson, V.K. Stokes,
G. Titomanlio, B. Vergnes,
J. Vlachopoulos, K.K. Wang

Conference Secretariat Ms. Marcinda Jackson IPE, University of Akron

Exhibition Organizer J.L. White, IPE, University of Akron

PPS EXECUTIVE COMMITTEE

President L.A. Goettler, Springfield, U.S.A.
President-Elect M. Lambla, Strasbourg, France
Past President T. Masuda, Kyoto, Japan
Treasurer G. Campbell, Potsdam, U.S.A.
Secretary G. Vassilatos, Wilmington, U.S.A.
Members-at-large T. Sakai, Hiroshima, Japan
G. Titomanlio, Salerno, Italy

**Editor-in-Chief,
International Polymer Processing** J.L. White, Akron, U.S.A.

**Editor,
Progress in Polymer Processing** W.E. Baker, Kingston, Canada

**International
Representatives** S.F. Bush, Manchester, U.K.
J.M. Haudin, Valbonne, France
A. Hrymak, Hamilton, Canada
S.C. Kim, Daejeon, Korea
I. Manas-Zloczower, Cleveland, U.S.A.
V. Nadkarni, Pune, India

Executive Secretary G. Spaziani, St. Janvier de Mirabel
Canada

REGISTRATION

PPS Members	\$300.00
Non-Members	\$350.00
Students	\$100.00
Accompanying Persons	\$50.00
One-Day Registration	\$150.00
Banquet	\$45.00

Full registration fee covers reception, plenary lectures and three days of meeting attendance including morning and afternoon coffee and a book of extended abstracts. In addition there is a wide range of lunch facilities nearby. In the event of cancellation of your participation, a refund of the fees paid, less an administrative fee of 30%, will be made. We must receive notification before March 15, 1994.

Non-members are invited to join the Polymer Processing Society. If you would like to join the PPS, the difference between member and non-member registration will be applied to your membership dues for one year. Membership of the PPS includes a subscription to International Polymer Processing. All payments must be made in U.S. Dollars.

CONFERENCE SCHEDULE

Tuesday,	April 5	Registration	12:00 - 20:00
		Opening Ceremony	18:00 - 18:20
		Plenary Lecture	18:20 - 19:20
		Walter J. Schrenk "Frontiers of Multilayer Films and Their Characterization"	
		Welcome Reception	19:30 - 21:00
Wednesday,	April 6	Registration	08:00 - 17:00
		Morning Sessions	08:40 - 12:00
		Exhibition	11:00 - 19:00
		Plenary Lecture	13:20 - 14:20
		Friedhelm Hensen "Development and Future of Extrusion Technology"	
		Afternoon Sessions	14:20 - 18:00
		Banquet	19:30 - 22:00
Thursday,	April 7	Registration	08:00 - 17:00
		Poster Session	15:00 - 18:00
		Morning Session	08:40 - 12:00
		Exhibition	11:00 - 19:00
		Plenary Lecture	13:20 - 14:20
		Toshio Kitao " Ceramic Fibers from Organic Precursors"	
		Afternoon Sessions	14:20 - 18:00
Friday,	April 8	Registration	08:00 - 17:00
		Morning Session	08:40 - 12:00
		Exhibition	11:00 - 16:00
		Afternoon Session	13:20 - 18:00

SOCIAL PROGRAM

Welcome Reception April 5
Wine and cheese to be served.

Banquet / Musical Evening April 6

The banquet / musical evening will be held at 19:00 and tickets for conferees should be pre-purchased at \$45 with the registration fee.

Following the banquet there will be a musical program featuring great American Composers
The program musicians and selection listed alphabetically by composer are:

SEVERENCE TRIO

Vladimir Deninzon,	violin
Ralph Curry,	cello
Luba Deninzon,	piano

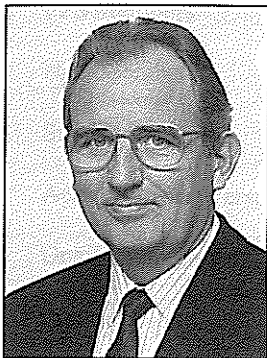
Bernstein	Selections from Musicals
Copland	"Ukulele Serenade" and "Hoe Down" from "Rodeo"
Gershwin	Selections from "Porgy and Bess" for violin and piano
	"Rhapsody in Blue"
Dvorak	Trio in E-minor ("Dumky")-Opus 90
Joplin	Ragtime

ACCOMPANYING PERSONS TOUR

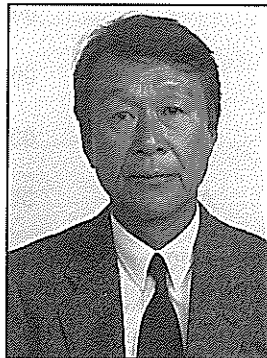
Stan Hywet April 6
Visit the Tudor mansion of Frank Seiberling, founder of Goodyear Tire and Rubber Company.

Visit to Amish Country April 7

TECHNICAL PROGRAM PLENARY SPEAKERS



Friedhelm Hensen
Barmag AG
Remscheid
Germany



Toshito Kitao
Kyoto Institute of
Technology
Kyoto, JAPAN



Walter J. Schrenk
Dow Chemical Co
Midland, MI

Symposia

1. Extrusion

J.F. Stevenson, J.F. Agassant

2. Compounding/Twin Screw

E. Canedo, E. Uhland, T. Sakai

3. Structure Development Processing

J.M. Haudin, J.E. Spruiell, T. Kikutani

4. Reactive Processing

L.J. Lee, T. Inoue

5. Rubber Processing

A Y. Coran, K. Inoue

6. Injection Molding

K.K. Wang, G. Titomanlio, H. Hamada

7. Composite Processing

A.J. Ryan, J. Castro

8. Thermoforming/Blow Molding

J. Vlachopoulos, W. Michaeli, Y. Saito

9. Fibers/Films

G. Campbell, F. Hensen, T. Kanai

10. Blends

N. Nakajima, G. Groeninckx, V. Nadkarni

11. Rheometry/Rheology

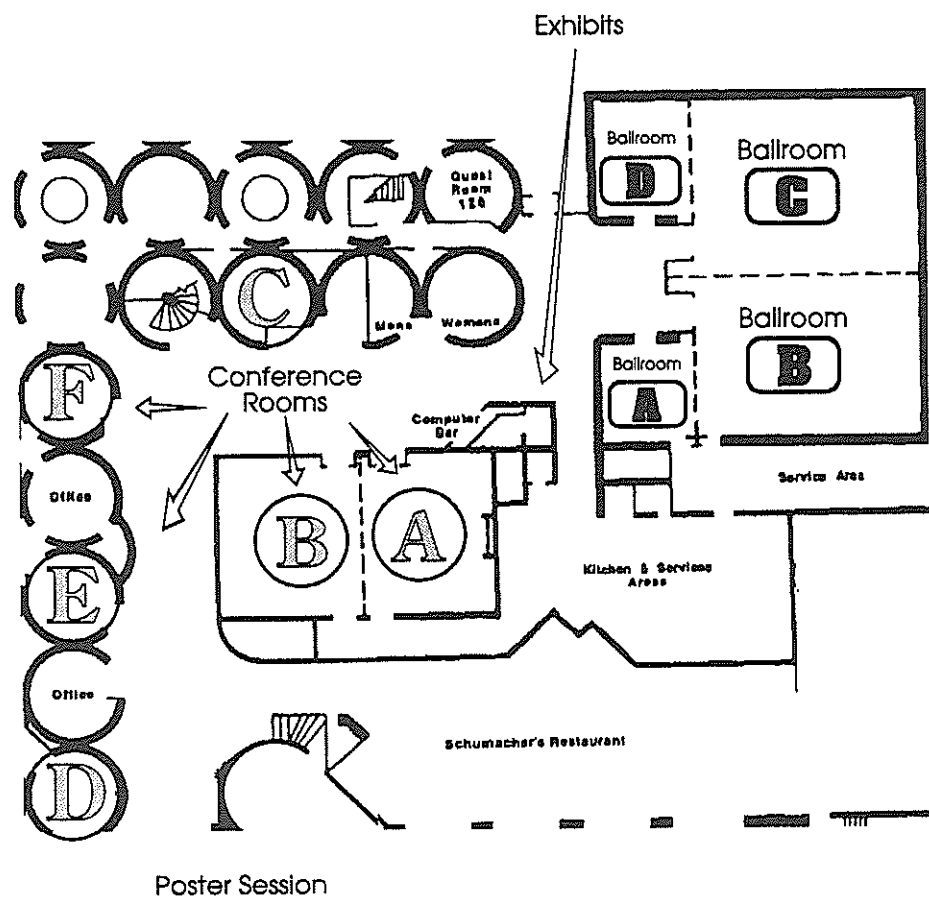
J. Dealy, B. Vergnes, K. Koyama

12. Welding/Joining

H. Potente, V.K. Stokes

Symposium Keynote Lecturers: D. Bigio (U.S.A.), P.K. Freakley (U.K), A. Garcia-Rejon (Canada), C.A. Hieber (U.S.A.), J.L. Kardos (U.S.A.), M.R. Kamal (Canada), P.G. Lafleur (France), J. Leblanc (France), S.J. Kurtz (U.S.A), C.W. Macosko (U.S.A), T. Masuda (Japan), H.E.H. Meijer (Netherlands), R. Muller (France), T. Nishio (Japan), C. Rauwendaal (U.S.A.), A.J. Ryan (U.K.), K. Schafer (Germany), J. Schultz (U.S.A.), L.R. Schmidt (U.S.A.), J.L. Stanford (U.K.), V.K. Stokes (U.S.A.), C.L. Tucker, III (USA), H. Yokoi (Japan),

AKRON HILTON INN at QUAKER SQUARE



See page vii for details of times and locations of the meeting symposia.

* Conference Room C: Slide Check

TIMES AND LOCATIONS OF THE MEETING SYMPOSIA

		BALLROOM C	BALLROOM B	CONFERENCE ROOM A	BALLROOM D	CONFERENCE ROOM B	BALLROOM A
WEDNESDAY April 6, 1994	MORNING	COMPOUNDING/ TWINSCREW- 2-1	INJECTION MOLDING- 6-1	REACTIVE PROCESSING 4-1	STRUCTURE DEVELOPMENT 3-1	RHEOLOGY/ RHEOMETRY- 11-1	
	AFTERNOON	COMPOUNDING/ TWINSCREW 2-2	INJECTION MOLDING 6-2	REACTIVE PROCESSING 4-2	STRUCTURE DEVELOPMENT 3-2	RHEOLOGY/ RHEOMETRY- 11-2	
THURSDAY April 7, 1994	MORNING	REACTIVE PROCESSING 4-3	INJECTION MOLDING 6-3	FIBERS/FILMS 9-2	THERMOFORMING/ BLOW MOLDING 8-1	RHEOLOGY/ RHEOMETRY- 11-3	
	AFTERNOON	EXTRUSION 1-1	INJECTION MOLDING 6-4	FIBERS/FILMS 9-1	THERMOFORMING/ BLOW MOLDING 8-2	BLENDS 10-1	COMPOSITE PROCESSING 7-1
FRIDAY April 8, 1994	MORNING	EXTRUSION 1-2	COMPOSITE PROCESSING 7-2		RUBBER PROCESSING 5-1	BLENDS 10-2	WELDING/JOINING 12-1
	AFTERNOON	EXTRUSION 1-3	INJECTION MOLDING 6-5	COMPOSITE PROCESSING 7-3	RUBBER PROCESSING 5-2	BLENDS 10-3	WELDING/JOINING 12-2

EXHIBITION AND POSTERS

Exhibits will run concurrently with the conference **from Tuesday 5 April to Friday 8 April**. It is intended that exhibits should attract and excite many experts gathered for the conference and in this spirit potential exhibitors are encouraged to display novel and innovative contributions to all aspects of polymer materials and process technology. The exhibition represents a unique opportunity to suppliers as a forum in which to display the state of the art in plastics processing equipment, polymer related software packages and raw materials. The exhibition will be located in the lobby in front of the meeting rooms. Posters will be displayed on **Thursday April 7 from 15:00 to 18:00**.