

10TH ANNUAL MIDWESTERN UNIVERSITIES
FLUID MECHANICS RETREAT
APRIL 7-9, 1983
GENEVA CENTER, ROCHESTER, INDIANA

PROGRAM

FRIDAY, APRIL 8, 1983

7:45 a.m.	Breakfast
8:30 a.m.	Welcoming Remarks
8:40 a.m.	Session I
10:00 a.m.	Coffee Break
10:30 p.m.	Session II
11:30 p.m.	Lunch
1:30 p.m.	Session III
3:10 p.m.	R & R etc.
5:30 p.m.	Dinner
6:30 p.m.	Session IV
8:10 p.m.	Social Hours

SATURDAY, APRIL 9, 1983

7:45 a.m.	Breakfast
8:30 a.m.	Session V
9:50 a.m.	Coffee Break
10:30 a.m.	Session VI
12:15 p.m.	Lunch

Presentation time will be 15 minutes, followed by a five-minute discussion. Speakers will be awarded a "FROG" at 15 + ϵ minutes which entitles the recipient to make a \$1 contribution to Refreshment Fund.

Session Chairman will be responsible for starting the sessions on time - - - please help him out - - -

SESSION I - (FRIDAY, APRIL 8, 1983)

CHAIRMAN: John Way - IIT
KOTGOF*: Tom Doligalski - ND

<u>TIME</u>	<u>AUTHORS</u>	<u>SCHOOL</u>	<u>TITLE</u>
8:40	John Foss	MSU	"Free Shear Flow Facility at MSU"
9:00	Casey Klewicki John Foss	MSU	"Entraining Boundary of a Free Shear Layer"
9:20	Kurt Weber	ND	"On the Use of Artificial Damping in Grid Generation Techniques"
9:40	Michael Plesniak	IIT	"Generation of Unsteady Vorticity Waves by Sound"

*****COFFEE BREAK*****

SESSION II - (FRIDAY, APRIL 8, 1983)

CHAIRMAN: Victor Goldschmidt - PU
KOTGOF: Robert Brodkey - OSU

<u>TIME</u>	<u>AUTHORS</u>	<u>SCHOOL</u>	<u>TITLE</u>
10:30	Douglas Stamps	UM	"The Effect of Fluid-to-Solid Heat Transfer on the Stability of Flows in Porous Media"
10:50	Kambiz Vafai	OSU	"Variable Porosity Effects on Heat Transfer in Porous Media"
11:10	Art Kovitz	NU	"Interfacial Tension, Measurement, Data Reduction and Error Analysis"
11:30	Chin Pan	UI	"Capillary Effects in Three-Phase, Two-Component, Gas-Liquid Inclusions"

*****LUNCH*****

*KEEPER OF TIME AND GIVER OF FROGS

SESSION III - (FRIDAY, APRIL 8, 1983)

CHAIRMAN: Barclay Jones - UI

KOTGOF: Hassan Nagib - IIT

<u>TIME</u>	<u>AUTHORS</u>	<u>SCHOOL</u>	<u>TITLE</u>
1:30	Roger Davis	PU	"Secondary Flows in Three-Dimensional Separation in Curved Ducts"
1:50	Louis Reifschneider	ND	"Functional Splitting as a Means of Solving the Unsteady Inflow-Outflow Problem"
2:10	S. F. Lin R. S. Brodkey	OSU	"Slurry Fuel Rheology"
2:30	Steve Lyons Charles Petty	MSU	"Drag Reduction in Fully Developed Turbulent Pipe Flow"
2:50	Chung-Sheng Yao	UI	"Laser Structure in Inclined Turbulent Convection"

*****R & R*****

SESSION IV - (FRIDAY, APRIL 8, 1983)

CHAIRMAN: Charles Petty - MSU

KOTGOF: Terry Conlisk - OSU

<u>TIME</u>	<u>AUTHORS</u>	<u>SCHOOL</u>	<u>TITLE</u>
6:30	Hafiz Atassi	ND	"Vortical and Entropic Disturbances of Potential Flows"
6:50	A. L. Randolph C. K. Law	NU	"Soot Formation from Burning Fuel Droplets"
7:10	Flint Thomas	PU	"The Natural and the Excited Jet"
7:30	Hassan Nagib Dominique Desruelle	ITT	"Beyond the Karman Vortex Street"
7:50	Steven Laing		"Vortex Ring/Moving Wall Interactions"

****SOCIAL HOURS****

The relationship between

SESSION V - (SATURDAY, APRIL 9, 1983)

CHAIRMAN: Art Kovitz - NU

KOTGOF: John Foss - MSU

<u>TIME</u>	<u>AUTHORS</u>	<u>SCHOOL</u>	<u>TITLE</u>
8:30	Farzin Shakib	IIT	"Analysis of Non-linear Interaction Using the Bi-coherence Calculation"
8:50	Odus Burggraf	OSU	"Spectral Method for 3-D Triple Decks"
9:10	Alan Cain	ND	"A Model for Segregated Chemically-Reacting Flows"
9:30	Robert Falco	MSU	"New Results on the Turbulence Production Process in Boundary Layers"

****COFFEE BREAK****

SESSION VI - (SATURDAY, APRIL 9, 1983)

CHAIRMAN: William Graebel - UM

KOTGOF: Hafiz Atassi - ND

<u>TIME</u>	<u>AUTHORS</u>	<u>SCHOOL</u>	<u>TITLE</u>
10:30	G. Maxwell	PU	"Velocity Measurements in a Furnace - and Other Data"
10:50	Ron Adrian	UI	"Laser Speckle Velocimetry"
11:10	Don Richards	OSU	"Thermal Convection of a Volumetrically Heated Fluid in a Vertical Cavity"
11:30	Patrick Reisenth ^e _{al}	IIT	"Spectral Estimation of Short Data Records by the Maximum Entropy Method"

*****LUNCH*****