

AERC 2007

4th Annual European Rheology Conference
Napoli, Italy
April 12-14, 2007



Final Report

European Society of Rheology

1. Organization, location and AERC 2007 Committees

The 4th Annual European Rheology Conference (AERC 2007) was held in Naples, Italy. The meeting started with registration on Wednesday afternoon, 12 April 2007, at the Hotel Excelsior. It was organized by the Italian Society of Rheology and the University

of Naples Federico II, under the auspices of the ESR. The conference center of the Campus of Monte Sant'Angelo of the University of Naples Federico II had the necessary infrastructure which ensured a successful meeting from the organizational standpoint.

Organizing committee

Chairs: Nino Grizzuti and Pier Luca Maffettone
Members: Paolo D'Antona
Bruno de Cindio
Dino Ferri
Domenico Gabriele
Romano Lapasin
Donatella Peressini
Alessandra Semenzato

Local arrangements committee

Domenico Acierno
Stefano Acierno
Francesco Greco
Stefano Guido
Giovanni Ianniruberto
Mario Minale

Administrative support:

F. R. Titomanlio: AERC 2007 Secretary

D. Blésès: ESR Web Master

Invaluable assistance was provided by the White Shirts, an enthusiastic team of students from the University of Naples.

Symposia and chairpersons:

Blends, emulsions, surfactants, and foams: *N. Willenbacher and M. Bousmina*

Nanocomposites, Colloids & Suspensions: *M. Pasquali and J. Vermant*

Solids, Glasses, and Granular Materials: *I. Emri and F. Lequeux*

Progress in Rheometry: *D. A. Weitz and H. Münstedt*

Multiscale Modeling and Simulations: *A. E. Likhtman and D. Theodorou*

NN Fluid Mechanics: from bulk to nanodevices: *J. Tsamopoulos and J. Cooper-White*

Biomaterials and Biofluids: *C. F. Schmidt and P. S. Doyle*

Food Rheology: *P. Fischer and C. Gallegos*

Flow Instabilities and Phase Transitions: *G. Peters and J. P. Decruppe*

Complex Fluids: Polyelectrolites, Associating Fluids and Liquid Crystals: *P. Callaghan, V. Kulichikhin*

Industrial Rheology and Processing: *M. Laun, J. Covas, M. Stading*

Polymer Solutions, Melts and Elastomers: *H. Watanabe, M. Warner*

2. Scientific part and participation

A full 3-days program (from about 9.00 AM to 6.00 PM) consisted of the Weissenberg Award Lecture, plenary (2), keynote (11) and contributed talks (236), as well as poster presentations (182), whereas at the same period an instrument exhibition took place.

Contributed Talks per Symposium:

Blends, emulsions, surfactants, and foams	25
Nanocomposites, Colloids and Suspensions	33
Solids, Glasses, and Granular Materials	10
Progress in Rheometry	21
Multiscale Modeling and Simulations	18
Non-Newtonian Fluid Mechanics: from bulk to nanodevices	25
Biomaterials and Biofluids	9
Food Rheology	15
Flow Instabilities and Phase Transitions	16
Complex Fluids: Polyelectrolites, Associating Fluids and Liquid Crystals ..	8
Industrial Rheology and Processing	25
Polymer Solutions, Melts and Elastomers	31

Weissenberg Lecturer:

T.C.B. McLeish “Molecular Rheology and the Pleasure of Being Wrong”

Plenary speakers:

G. G. Fuller “Complex Fluid Interfaces: Industrial and Biological Applications”
D. Vlassopoulos “Neither reptation nor retraction: Relaxation of ring polymers” .

Keynote speakers:

F. Baaijens “Mechanically induced collagen remodeling in cardiovascular tissues”
J. Bergenholtz “Structure and rheology of PEG-grafted colloids”
W. Briels “Coarse graining of slow variables in soft matter simulations”
R. Brummer “Measuring the Viscosity - An Easy Job?!”
S.J. Lee “Use of micro-devices in rheology: Case studies”
S. Manneville “Recent experimental advances on shear banding”
P.D. Olmsted “Dynamics of the shear banding instability”
O. Pouliquen “Dense granular flows: a peculiar visco-plastic fluid”
H. Rehage “Particle Tracking Quantitative description of the rheological properties of viscoelastic surfactant solutions”
K. Urayama “Deformation Coupled to Director Rotation in Nematic Elastomers under Electric and Mechanical Fields”
S.Q. Wang “Particle Tracking Velocimetry: a Valuable Component of Rheometry”

Exhibitors

Anton Paar
CEAST
KSV
Malvern
Penati Strumenti

TA Instruments
Thermo Haake
Xpansion

A total of 409 participants (284 delegates) from 36 countries attended the meeting.
The Delegates and Students distribution per country is as follows:

Algeria.....	2
Australia	4
Austria	3
Belgium.....	8
Brazil.....	5
Canada.....	7
Cyprus.....	2
Czech Republic	10
Denmark	4
Finland.....	2
France	59
Germany	34
Greece	8
Iran	2
Israel.....	1
Italy.....	75
Japan	17
Kuwait	1
Lithouania	1
Mexico	3
New Zealand.....	2
Norway.....	1
Poland	2
Portugal	6
Romania.....	8
Russia	5
Slovenia	6
Spain	15
South Africa	2
South Korea	11
Sweden.....	5
Switzerland.....	9
Taiwan	5
The Netherlands	15
UK	33
USA.....	13

3. Social program

Wednesday 11 April 2007, Welcome Reception at Hotel Excelsior, 6.00-9.00 PM

Thursday 12 April 2007, ESR dinner at Circolo Nazionale dell'Unione 8.00 PM

Friday 13 April 2007, Banquet at Hotel Excelsior 7.30 PM

4. Finances

INCOME

Registration fees	€ 91,903.09
Funding from sponsors.....	€ 25,143.78
Net support from exhibitors	€ 10,340.00
<u>Banquet.....</u>	<u>€ 9,750.00</u>
TOTAL	€137,136.87

EXPENSES

Administration

(secretarial and technical personnel,

utilities, communications, banking) € 23,839.78

Books of abstracts, leaflets..... € 9,384.00

Plenary speakers support € 3,785.23 |

Conference rooms € 29,072.00 |

Audio-visual, PCs, networking € 5,665.50 |

Coffee breaks, lunch and refreshments € 15,000.00 |

Banquet, welcome reception, ESR

delegate dinner € 24,915.00 |

Transportation..... € 6,725.00 |

ESR Fees..... € 5,680.00 |

Guardian, cleaning, building services € 3,896.29 |

 Material for the participants | € 3,704.16 |

TOTAL

 €131,666.96 |

Net Balance

 € 5,469.91 |

5. Sponsors

University of Naples "Federico II"

University of Naples II

Polimeri Europa

INSTM

CTG Italcementi Group

Procter & Gamble

BASF

Anton Paar

TA Instruments

Malvern Instruments

6. Final remarks

Based on the organizing experience of this Congress, we wish to highlight some considerations that might be helpful for the next AERC events:

- The position in the week could be reconsidered. It was very difficult to organize the sessions on Saturday, as most delegates preferred to leave Naples on Saturday morning. Furthermore, delegates coming from industry generally do not work on Saturdays.
- We think that the total number of talks should not exceed 180 distributed over 5 parallel sessions. In our case, we received about 300 oral contribution submissions. Based on the indications from symposium chairs, the number was reduced to about 240, which required a sixth session. This format appeared to be too dispersive. This problem can be solved in two ways: (i) a 3.5 day structure might be considered; (ii) a strict ESR policy on paper selection could be introduced, so that symposium chairs could operate under well defined selection constraints.
- The session organization strongly depends on the activity of the symposium chairs. We observed that active and interested chairpersons made a wonderful job: this was particularly the case for the “Solids, Glasses, and Granular Materials”, “NN Fluid Mechanics”, “Industrial Rheology and Processing”, “Polymer Solutions, Melts and Elastomers” symposia. Therefore, a careful selection of chairpersons is highly recommended
- In retrospective, we realize that our choice for the symposia topics was too wide. We think that a reduction of the number of symposia, holding a good balance between “traditional” and “innovative” rheological issues, would improve the quality of the Congress.

Naples, 14 May 2008

Nino Grizzuti
Pier Luca Maffettone