

SF2M-DGM Texture and Anisotropy Symposium 2012

Caen University, France, Tuesday 31st May & 1st June 2012

Organized by Professor D. Chateigner

The **annual German-French symposium on "Texture and Anisotropy"** of the joint committees of **DGM-SF2M** took place at the Centre National de Recherche Technologique (CNRS UMS 3318), Caen University – France.

For the first year, this symposium was organised on 2 days from May 31st to June 1st 2012, by Professor Daniel Chateigner with the support of the INEL society and got attended by 40 participants.

The topic of this year's T&A Day was "**Advancements in Texture Analysis**". This theme included, among others, the following subjects:

- 1/ **Methodological developments using x-rays, neutrons and electrons**
- 2/ **Fundamentals, simulations**
- 3/ **Novelties in texturation methods**

On special request of the T&A delegates, the 2nd morning was scheduled for a demonstration by **Luca Lutterotti** of the performance of his Combined Analysis software: MAUD. This morning session was an opportunity to get practice on your own laptop with dedicated examples.

May 31st:

From 8.00 Registration desk opening at CNRT – ENSICAEN, ground floor

09.00 – 09.10 Welcome, general information (Conference room 2nd floor CNRT)

Session 1: chairman Paul van Houtte

09.10 – 09.40 Luca Lutterotti: Novelties in Combined Analysis within MAUD

09.40 – 10.00 Leo A.I. Kestens, Roumen Petrov: Texture control in metal sheet processing by innovative processing

10.00 – 10.20 V. Chailloux, H. Réglé, I. Drouelle, D. Solas, F. Brisset, F. Bonnet, T. Baudin: Texture and microstructure evolution in torsion at high temperature on metal matrix composite

10.20 – 10.50 Coffee break

Session 2: chairman Werner Skrotzki

10.50 – 11.10 Paul Van Houtte, L. Qin, M. Seefeldt: The use of Statistical Methods in the study of Texture Gradients

- 11.10 – 11.30 L. Qin, M. Seefeldt, T. A. Bennett, R. H. Petrov, P. Van Houtte: Meso-mechanical Modelling on Ridging or Roping of Aluminium Alloys
- 11.30 – 11.50 Aline Dellicour, Luca Lutterotti, Bénédicte Vertruyen, Mark Rikel, Daniel Chateigner: Combined analysis method: from sample to texture
- 11.50 – 12.10 H. Azzeddine, T. Baudin, A.L. Helbert, M. H. Mathon, M. Kawasaki, Djamel Bradai, T. G. Langdon: Experimental and modelling texture evolution during ECAP of a Cu-Ni-Si alloy
- 12.30 – 14.00 Lunch

Session 3: chairman Claude Esling

- 14.00 – 14.20 Werner Skrotzki, A. Eschke, C.-G. Oertel, J. Scharnweber, T. Marr, I. Okulev, J.-J. Freudenberger, J. Romberg, U. Kühn, L. Schultz, J. Eckert: Texture Development in Ti/Al composites Produced by accumulative swaging and bundling
- 14.20 – 14.40 Francis Wagner, A. Ayad, N. Rouag and A.D. Rollett: An accelerated Potts model for grain growth - Application to IF steels
- 14.40 – 15.00 Boussois K., Tessier-Doyen N., Blanchart P.: Anisotropic kinetic of the kaolinite to mullite reaction sequence in multilayer ceramics
- 15.00 – 15.20 Romain Que, Julian H. Driver, Paul R. Dawson: In-grain orientation spread evolution in polycrystalline aluminium submitted to large strains
- 15.30 – 16.00 Coffee break

Session 4: chairman Heinz-Günter Brokmeier

- 16.00 – 16.20 Yudong Zhang, Claude Esling, Zongbin Li, Xiang Zhao, Liang Zuo: New insights into the crystal structure model of modulated martensite according to “adaptive phase theory”
- 16.20 – 16.40 Sijia Mu, John J. Jonas, Günter Gottstein: Variant selection of primary, secondary and tertiary twins in a deformed Mg alloy
- 16.40 – 17.00 W. Wang, I. Drouelle, F. Brisset, M.H. Mathon, T. Auger, T. Baudin: Recrystallization study of two cold rolled Ni-Cr-W alloys
- 17.00 – 17.20 B. Nabi, A.L. Helbert, T. Baudin, T. Waeckerlé, F. Brisset: Microstructure and texture of a recrystallized ordered Fe-Co-2V alloy

20:00: Dinner at St Andrews restaurant, downtown Caen

June 1st:

- 09.00 – 10.20 Maud session
- 10.20 – 10.50 Coffee break
- 10.50 – 12.00 Maud session
- 12.00 – 12.20 General discussion and conclusion
- 12.30 Lunch and departure
- 14.00 Lab visit

We would like to warmly thank Stéphanie Gascoin for the considerable efforts made in the lively organisation of this symposium, and INEL for their support.

Daniel Chateigner
Prof. Univ. Caen Basse-Normandie
CRISMAT-ENSICAEN

Claude Esling
Prof. Univ. de Lorraine
LEM3 UMR 7239 & Labex DAMAS.