



Paints and Colors in Molecular Biology: Requirements and Solutions

Kirchhoff-Institute of Physics, Heidelberg

June 1-2, 2006

Organisers:

M. Hausmann and C. Cremer, Heidelberg

Specific molecular labelling using fluorescent staining procedures has become a general tool for widespread applications in biology and medicine. New dyes, novel probes and multicolour approaches have considerably increased the specificity and sensitivity for instance of screening techniques or microscopic detection of cells or sub-cellular organelles. For many applications routine protocols and tool kits are (commercially) available. Nevertheless, the improvements of sensitivity, specificity, and velocity of detections systems offer new potentials for biological research and medical diagnostics. Requirements from end-users on one hand and system engineers on the other hand have triggered many investigations of staining technologies using fluorescent dyes and nano-crystals. Therefore, the general goal of the workshop is to present recent developments and novel approaches and applications in this field in order to obtain new experimental insights into the specific conditions and constraints of labelling techniques for microscopic and screening analysis of DNA and proteins in cells and bio-molecules. The information and knowledge being obtained is expected to support both the developers and the users to find optimized integrated methods for research and diagnostic applications.

Specific Topics to be discussed:

- Novel Dyes for DNA und Proteins
- Nanocrystals
- New Labelling Approaches
- Applications in Microscopy and Microtechnology Arrays

Registration:

Registrations will be accepted until the meeting is filled.

Registration Fee: 25 €

For further information or to submit registration materials, please contact:

Margund Bach

- Conference Secretariate -

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Preliminary Program:

Thursday, June 1, 2006

13 h	Registration
13.30 h	Welcome Scientific lectures - Requirements
15.30 h	Coffeebreak
16 h	Scientific lectures - Dyes
19 h	Barbecue

Friday, June 2, 2006

9 h	Scientific lectures - Nanocrystals
10. 45 h	Coffeebreak
11.15 h	Scientific lectures - Applications
13 h	Snack
13.30 h	Discussion
15 h	Departure