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Wetting Phenomena

Proceedings of a Workshop on Wetting Phenomena Held at the University of Mons, Belgium October 17–19, 1988



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Foreword

Our department of Statistical Mechanics and Probability is very pleased with the organisation, for the second time, of a workshop on wetting phenomena. Wetting is a very lively subject in statistical physics and we shall surely have the opportunity of hearing of how the many aspects and tools of this branch of physics apply to the field.

May I also rejoice in the international participation in this workshop.

Mons, October 1988

Ph. de Gottal

Preface

This volume contains the proceedings of the workshop on wetting phenomena held in the University of Mons in October 1988.

Many problems of practical importance involve the wetting of a solid by a liquid or more generally the wetting of a surface dividing two phases by a third phase (paint, lubricant, aerosol, metal coating, etc). The study of these phenomena at a microscopic scale has, however, been developed only recently, giving new insight on dynamical interface profiles, layering transitions, multiphase wetting, influence of disorder, adsorption, and so on. The mathematics of random surfaces has also become a very active field of research.

The need for sophisticated tools, both experimental and theoretical, and the interdisciplinary nature of the subject, have made it both useful and sometimes difficult to have meetings between the different specialists. The Mons workshop and these proceedings bring together samples of recent advances from many different approaches to wetting.

We thank the contributors for making their lectures so appealing that work extending beyond the interfaces of this fascinating subject is bound to have been stimulated.

The financial support from the Région Wallonne and the Université de Mons is gratefully acknowledged.

We also thank Marie-Anne Carlier for assistance in preparing the workshop and these proceedings.

Mons, October 1988

Joël De Coninck François Dunlop

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