PREFACE

Letter from the Editor

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Biointer*phases* Volume 4 is now available in printed form, and again contains cutting-edge science from the best groups in the field worldwide. This is also reflected in our first impact factor of 2.347, which is remarkable for a journal only 3 years old. And the trend is positive! Our goal is to establish Biointer*phases* as the leading journal in quantitative biological interfaces analysis over the next three years, and thus providing free access to data, models and interpretations to the scientific community and to industrial researchers worldwide. In Volume 4 you will find a new In Focus section of articles describing the use of polymer brushes in biological applications, among them their use in cell adhesion, protein imprinting, and micropatterning on the wafer scale. One paper directly addresses the anti-fouling properties of polypeptoids from both an experimental and theoretical perspective to provide specific guidelines for optimal anti-fouling coatings.

Regular articles provide new insight into zwitterionic supported lipid bilayer membranes; the effect of electric fields on algae spore settlement; the measurement of cell adhesion forces; spectroscopic studies of biointerfaces; and development of new theoretical and modeling tools to account for electrostatic effects. Also, we have the first contribution from a biointerphase research area which has so far attracted less attention in our journal: the formation and properties of extracellular polymers in plants.

This list of topics is by no means complete, and you will note that the biological systems investigated in this volume include proteins, adult mammalian cells, stem cells, marine organisms, and plants. An interesting thought emerges when reading the papers on cell adhesion, spore settlement, and protein adsorption. In a qualitative sense there are many similarities of surfaces which are resistant to protein, cell and spore adhesion, suggesting that general strategies may emerge to enhance or inhibit their interaction with artificial surfaces. More to come in Volume 5!

