



Volume 519, 20 April 2017

ISSN 0927-7757

An International Journal

COLLOIDS AND SURFACES A

**Physicochemical and
Engineering Aspects**

Special Issue

**Smart and green interfaces:
Fundamentals and diagnostics**

**Edited by
Elena Mileva and Reinhard Miller**

www.elsevier.com/locate/colsurfa



Contents lists available at ScienceDirect

Colloids and Surfaces A: Physicochemical and Engineering Aspects

journal homepage: www.elsevier.com/locate/colsurfa

Editorial

COST action MP1106 international symposium: “Smart and green interfaces: Fundamentals and diagnostics” (SGI-FunD 2015) October 29–31, 2015, Sofia, Bulgaria



The International Symposium “Smart and green interfaces: fundamentals and diagnostics” was organized by the Department of Interfaces and Colloids (Institute of Physical Chemistry, BAS) and was devoted to the 80th Anniversary of Dotchi Exerowa. The Symposium was supported financially by COST Action MP1106 “Smart and green interfaces – from single bubbles and drops to industrial, environmental and biomedical applications” and sponsored by Aquachim PLC.

The research career of Dotchi Exerowa started in 1958, under the guidance of Professor Alexei Scheludko. Together they have published several papers, that laid the foundations of the Bulgarian School of Colloids and Interfaces (Scheludko, Exerowa, Über den elektrostatischen Druck in Schaumfilmen aus wässrigen Elektrolytlösungen, *Koll. Z.*, 165 (1959) 148; Scheludko, Exerowa, Instrument for Interferometric Measuring of the Thickness of Microscopic Foam Layers, *Comm. Dept. Chem. Bulg. Acad. Sci.*, 7 (1959) 123; Exerowa, Scheludko, Taches noires et stabilité des mousses in: J.Th.G. Overbeek (Ed.), *Chemistry, Physics and Application of Surface Active Substances*, Gordon & Breach Sci. Publ., London, vol.2, 1964 p.1097; Exerowa, Scheludko, Porous Plate Method for Studying Microscopic Foam and Emulsion Films, *Compt. Rend. Acad. Bulg. Sci.*, 24 (1971) 47). The key scientific achievements of Dotchi Exerowa are related to the study of surface forces in thin liquid films, as well as to the adjoining aspects in physics and chemistry of the surface phenomena. The three-day international scientific event has been an additional tribute to her research merits in the field of colloids and interfaces.

SGI-FunD was attended by 110 participants from 23 European countries. The scientific Program was focused on five major research topics:

- Foams and emulsions
- Smart fluid interfaces
- Wetting phenomena
- Surface forces and thin liquid films
- Biosurfactants and medical applications

The Symposium consisted of 12 keynote (30 min) and 47 oral (20 min) presentations, running in three morning sessions (29–31 October 2015) and two afternoon sessions on Thursday and Friday (October 29–30, 2015). There have also been two poster sessions on Thursday and Friday (October 29–30, 2015) with 38 poster presentations. SGI-FunD 2015 included a MP1106 Cluster meeting “Nanomaterials and Nanotechnologies” with a roundtable discussion on the participation in future Horizon 2020 calls related to Smart and Green Interfaces and Applications (in particular NMBP – 2016–2017).

The present Special Issue of Colloids and Surfaces: Physicochemical and Engineering Aspects contains selected original scientific contributions, based on the presentations at the SGI-FunD Symposium.

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