

## Reading list for Surfaces and Interfaces, TFYA47, 2025

### Books

Attard, Gary, Barnes, Colin, (1998) *Surfaces* Oxford : Oxford University Press, 1998  
ISBN: 0198556861, 9780198556862

Barnes, Geoffrey, Gentle, Ian, (2011) *Interfacial science : an introduction* 2nd ed. Oxford : Oxford University Press, c2011  
ISBN: 9780199571185, 019957118x

### Other

#### Course literature

The literature consists of the two books listed below, and additional material on electrochemistry and cyclic voltammetry, which is available from the course webpage under "Lab exercises".

- G.T. Barnes & I.R. Gentle, *Interfacial science: An introduction*, 2nd ed., Oxford University Press 2011, ISBN 9780199571185.
- G. Attard & C. Barnes, *Surfaces*, Oxford University Press 1998, ISBN 9780198556862.

#### Other literature

As far as I am aware, there are no single books covering the whole course contents, but here is one which almost does, and which could be good alternative reading:

- H.-J. Butt, K. Graf, M. Kappl, *Physics and Chemistry of Interfaces*, 3 uppl., Wiley-VCH 2013, ISBN 9783527412167.

Other literature for further reading:

- J.C. Berg, *An Introduction to Interfaces and Colloids*, World Scientific 2009, ISBN 9789814299824 (emphasis on surface and colloid chemistry, liquid interfaces).
- J.N. Israelachvili, *Intermolecular and surface forces*, 3 uppl., Academic Press, 2011, ISBN 9780123751829 (stand literature on intermolecular and surface forces).
- A.W. Adamson and A.P. Gast, *Physical chemistry of surfaces*, 6 uppl., Wiley 1997, ISBN 0471148733 (A classic in the field, with both fundamentals and applications).
- H.Y. Erbil, *Surface Chemistry of Solid and Liquid Interfaces*, John Wiley &

Sons 2006, ISBN 9781405119689 (some emphasis on thermodynamic aspects).