Reading list for Surfaces and Interfaces, TFYA47, 2020

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).