

## Workshop on Polyelectrolytes

4TU.High-Tech Materials

*De Witte Vosch (Utrecht),  
Thursday 12 March 2026*

### Programme

#### Scope and target audience

The 4TU.HTM Workshop on Polyelectrolytes aims to bring together researchers from academia and industry to share and discuss recent advances in the synthesis, characterization, and application of polyelectrolytes. Topics include the design of novel charged polymers, polyelectrolyte complexation, responsive materials, bioinspired assemblies, and their roles in energy, environmental, and biomedical technologies. Emphasis will be placed on understanding charge-driven interactions, molecular architecture, and structure–property relationships. The workshop is set to encourage interdisciplinary dialogue between junior and senior polymer chemists, physicists, materials scientists, and engineers, fostering collaborations and innovative approaches to solve global challenges using polyelectrolyte-based materials.

#### Initiative

This workshop is initiated by

Louis de Smet

Professor at the Laboratory of Organic Chemistry, WUR

&

Wiebe de Vos

Professor Membrane Surface Science, UT

All information

[www.4tu.nl/htm](http://www.4tu.nl/htm)

<b>9.45</b>	<b>Welcome and coffee</b>
10.15 – 10.25 10.25 – 10.35	Introduction <b>Arjan Mol</b> (TU Delft, scientific director 4TU.HTM), <b>Wiebe de Vos</b> (UT), <b>Louis de Smet</b> (WUR)
10.35 – 11.00	<b>Marleen Kamperman</b> (RUG) <i>Bio-inspired Processing of Polyelectrolyte Complexes</i>
11.00 – 11.25	<b>Sissi de Beer</b> (UT) <i>Polyelectrolyte Brushes in Electric Fields: Fundamentals and Applications</i>
11.25 – 11.50	<b>Bas van Ravensteijn</b> (UU) <i>Leveraging pathway complexity in polyelectrolyte self-assembly - Routes to more potent gene delivery vehicles (?)</i>
<b>12.00 – 13.00</b>	<b>Lunch</b>
13.00 – 13.25	<b>Saskia Lindhoud</b> (UT) <i>If it is not part of the solution, it is part of the polyelectrolyte complex</i>
13.25 – 13.50	<b>Jasper van der Gucht</b> (WUR) <i>Compleximers: water-free solid polyelectrolyte complexes with moderated ionic interactions</i>
13.50 – 14.15	<b>Ilja Voets</b> (TU/e) <i>The power and peculiarities of nanoscopic polyelectrolyte-based particles</i>
14.15 – 14.40	<b>Maarten Smulders</b> (WUR) <i>Zwitterionic polymer brushes: Molecular design, synthesis and application</i>
<b>14.45 – 15.15</b>	<b>Break</b>
15.15 – 15.40	<b>Andrea Giuntoli</b> (RUG) <i>Modeling complex polyelectrolytes for material design</i>
15.40 – 16.05	<b>Mark Vis</b> (TU/e) <i>Self-consistent field description of polyelectrolyte-grafted colloidal actuators</i>
16.05 – 16.30	<b>Evan Spruijt</b> (RU) <i>Polyelectrolyte complexation: new approaches for life-like coacervate compartments</i>
<b>16.30 – 17.30</b>	<b>Closure, drinks &amp; bites</b>