Fundamentals of Polysaccharide Analysis

Virtual Course 1 Schedule

December 7-8, 2026

This event will be held live, and all times are Eastern Standard Time

Monday, December 7, 2026

9: 00 a.m. - 9:15 a.m.

Introduction and Welcome

Dr. Parastoo Azadi

9:15 a.m. – 10:45 a.m.

Lecture – "Structural Characterization of Carbohydrates"

This lecture covers various methods for composition and linkage analysis of monosaccharide residues of polysaccharides, oligosaccharides and glycoconjugates

Dr. Parastoo Azadi

10:45 a.m. – 11:00 a.m. – Break

11:00 a.m. – 12:00 p.m.

Lecture – "Isolation and Characterization of Bacterial Surface Polysaccharides"

Dr. Artur Muszynski

12:00 p.m. – 1:00 p.m. – Lunch Break

1:30 p.m. – 3:00 p.m.

Lecture – "Introduction to Carbohydrate Chemistry"

Dr. Geert-Jan Boons

3:15 p.m. – 5:00 p.m.

Lab Demo and Data Analysis – Composition by Trimethylsilyl (TMS) and Alditol Acetate (AA) Derivatization

Drs. Artur Muszynski & Ian Black

Tuesday, December 8, 2026

9:00 a.m. – 10:00 a.m.

Lecture – “Polysaccharide Structural Analysis Informs Our Understanding of Pectin Structure, Synthesis and Function”

Dr. Debra Mohnen

10:00 a.m. – 11:00 a.m.

Lecture – “Introduction to High Performance Anion Exchange Chromatography (HPAEC)”

------ for monosaccharides and oligosaccharides analysis

Dr. Parastoo Azadi

11:15 a.m. – 12:00 p.m.

Lecture – “Preparative and Analytical Size Exclusion Chromatography (SEC) of Polysaccharides”

------- a practical approach for isolation and purification of polysaccharides

Dr. Ian Wallace

12:00 p.m. – 1:30 p.m. – Lunch Break

1:30 p.m. – 2:30 p.m.

Lecture – “Bacterial Glycoproteins”

Dr. Christine Szymanski

2:45 p.m. – 3:45 p.m.

Lecture – “Structural Characterization of Glycoconjugates by Nuclear Magnetic Resonance (NMR) Spectroscopy”

Dr. Christian Heiss

4:00 p.m. – 5:00 p.m.

Lab demo and data analysis – For Partially Methylated Alditol Acetate (PMAA) Linkage Analysis

Drs. Artur Muszynski & Ian Black