Characterization of *Anaeromyxobacter dehalogenans* and Related Metal-Reducing Bacteria by MALDI-TOF MS

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### Procedure

1. Sample preparation:
   - collect and centrifuge cells
   - wash cell pellet twice with sucrose buffer
2. Spot sample on MALDI plate
3. Analyze by MALDI-TOF

### MALDI-TOF Mass Spectrometry

- MALDI sample plate
- Spectrum of each
- \( m/z = 2V(TOF/D)^2 \)

### Organisms Analyzed

(Click for more details)

- **Organism**: *Desulfurnonas michiganensis* strain BB1
- **Class Name**: 2CP-C
- **Acceptor**: Fumarate

### Classifications

- **Standard**
  - **Class**: 2CP-C
  - **Species**: Fumarate
- **Classification**
  - **Class**: 2CP-C
  - **Species**: Fumarate

### Spectra of Metal-Reducing Bacteria and *E. Coli*

**Organisms**: 2CP-C, 2CP-C (Fumarate), 2CP-C (Nitrate)

**Acceptor**

- Fumarate
- Nitrate

**Genus**

- Desulfurnonas michiganensis strain BB1
- *E. Coli*

**Phylogeny**

- The metal reducers analyzed are closely genetically related.

### Gel-view Representation: Spectra of 2CP-C Grown with Various Electron Acceptors

**Phylogeny**

- The metal reducers analyzed are closely genetically related.

### Acknowledgements

Department of Energy • Environmental Remediation Sciences Program of the Department of Energy

Natural and Accelerated Bioremediation Research, a program of the Department of Energy