

## BIEMANN MEDAL

**2016 RECIPIENT: KRISTINA "KICKI" HÅKANSSON**  
**AWARD LECTURE: 4:45 PM TUESDAY, HALL 1, LEVEL 1**



**Dr. Kristina "Kicki" Håkansson** has been awarded the 2016 Biemann Medal for her contributions related to her work to develop and elucidate the mechanisms of electron-based activation methods, including electron capture dissociation, electron detachment dissociation, and electron induced dissociation. She has applied these electron-based activation methods to identify and characterize biological molecules from a number of classes, including peptides, oligonucleotides, and oligosaccharides.

The challenges associated with structural characterization of increasingly complex biological molecules has inspired the development of many new activation methods. Ones involving the attachment or detachment of an electron to an ion have shown great promise and have motivated renewed interest in gas-phase radical ion chemistry, both areas which are hallmarks of the Håkansson group. Dr. Håkansson has focused on deciphering the mechanisms of electron-activated dissociation and shown the outstanding utility of these methods for analysis of nucleic acids, oligosaccharides, and peptides including ones with labile modifications like phosphorylation. Negative ion electron capture dissociation (discovered in the Håkansson laboratory) in particular

has shown excellent performance for characterization of phosphorylated and sulfated peptides ionized in the negative mode. Her group has also shown that electron-activated dissociation methods are gentle enough to allow preservation of higher order structures of nucleic acids.

Dr. Håkansson is a professor in the Department of Chemistry at the University of Michigan in Ann Arbor.

## 2016 RESEARCH AWARDS

**AWARD PRESENTATION: 4:45 PM TUESDAY, HALL 1, LEVEL 1**

The Research Awards are fully funded by Thermo Fisher Scientific and Waters Corporation in the amount of \$35,000 each.

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