



# TEMSpec - 4<sup>th</sup> International Workshop on TEM Spectroscopy in Materials Science

Uppsala, Sweden

17<sup>th</sup>-19<sup>th</sup> June, 2019

Welcome to the 4<sup>th</sup> workshop on TEM spectroscopy in materials science! The workshop will be held on June 17<sup>th</sup> - 19<sup>th</sup> in Uppsala, Sweden. It is open to researchers from all branches of materials science. The workshop will treat Energy Dispersive X-Ray Spectroscopy (EDX), Electron Energy-Loss Spectroscopy (EELS) as well as their applications to nano and atomic scale studies in materials. The workshop consists of two days of lectures and one day of laboratory courses that include imaging and spectroscopy at the atomic level. The invited speakers currently include:

- |                         |   |                              |
|-------------------------|---|------------------------------|
| • <b>Nestor Zaluzec</b> | Latest developments in TEM-EDX                                      | ANL, USA                     |
| • <b>Cecile Hebert</b>  | Tutorial and latest developments in EELS                            | EPFL, Switzerland            |
| • <b>Lewys Jones</b>    | Spatial resolution and control of beam damage                       | Trinity College, Ireland     |
| • <b>Fredrik Hage</b>   | Ultra Low loss EELS   | SuperSTEM, UK                |
| • <b>Ling Xie</b>       | 2D and 3D spectroscopy analysis on nano-precipitates                | Uddeholm, Sweden             |
| • <b>Axel Lubk</b>      | Inelastic Momentum Transfer in DPC                                  | TU Dresden, Germany          |
| • <b>Per Persson</b>    | Electron microscopy of 2D transition metal carbides (MXenes)        | Linköping University, Sweden |
| • <b>Jan Rusz</b>       | Analysis of magnetism down to atomic scale ( Theory and Simulation) | Uppsala University, Sweden   |

Technical presentations include spectroscopies in aberration corrected TEM/STEM, new instrumentation, quantification, detection limits.

Registration: 150€ (students), 200€ (researchers) including workshop dinner. Travel grants for students may be available. As the number of participants is limited, we encourage registration as early as possible.

**Abstract submission deadline: 27<sup>th</sup> May**

**Early bird registration ends 19<sup>th</sup> May**

For more information, please contact: [tem-workshop@angstrom.uu.se](mailto:tem-workshop@angstrom.uu.se)



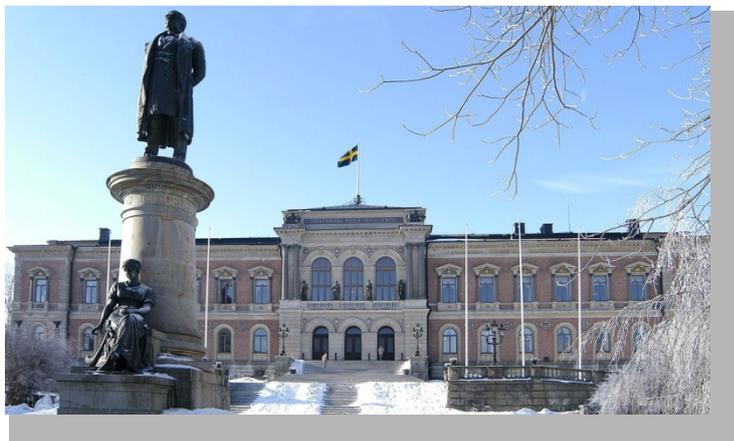


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## Uppsala, Sweden

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Uppsala is a typical Nordic town with a large student population. It is the fourth largest city of Sweden and the seat of the oldest university in northern Europe. The weather in June is usually sunny, pleasant and worth spending outdoors. The currency is the Swedish crown (SEK). Visa, Mastercard and American Express are widely accepted. The



local language is Swedish, but are often accepted most people understand and speak English. Arlanda, the largest airport in Sweden, is situated halfway between Uppsala and Stockholm and it is the easiest way to reach the city from outside Sweden.



Uppsala University, founded in 1477, counts about 4 000 teachers and researchers in 9 faculties and 40 000 students, of which 2 000 are doctoral candidates. Figures such as Anders Celsius, Carl Linnaeus, Anders Ångström and Olof Rudbeck as well as eight Nobel laureates are associated with UU.

The Ångström Laboratory is situated at Polacksbacken, 3 km south of the center of Uppsala. Research in Physics, Chemistry, Mathematics and Engineering Sciences is carried out here. Ångström contains the largest clean room in Scandinavia.

**Organizing committee:** K. Leifer, G. Svensson, J. Ruzs, H. Ali

**Scientific committee:** K. Leifer, S. Muto, J. Ruzs, N. J. Zaluzec.

