Vanessa Wood, Department of Information Technology and Electrical Engineering, ETH Zürich, has been named a 2018 Materials Research Society (MRS) Outstanding Young Investigator. Wood was cited “for innovative work in visualizing, quantifying, and explaining transport processes in materials and devices.” She will receive the award Wednesday, April 4, at the 2018 MRS Spring Meeting in Phoenix and will present her talk Monday, April 2 at the PCC.

Wood currently heads the Laboratory for Nanoelectronics at ETH Zürich. The Laboratory investigates the potential of nanoscale materials in electronic devices at each point in the energy life cycle—collection, storage, and usage. Using a combination of experiment and theory, the group studies the fundamental electronic properties of materials and applies the findings to the rational design of devices that harness the novel form factors and properties provided by nano-sized materials.

Her research focuses on the development of analytical techniques to study the electronic and ionic transport in solution-processed structures composed of materials with nanoscale dimensions. The information gained from these studies is then applied to developing new materials and device architectures for optoelectronic and electrochemical energy-storage applications, such as LEDs, solar cells, and lithium-ion batteries.

Wood received her BSc degree in applied physics from Yale University and her PhD degree in materials science from the California Institute of Technology. Chueh is recognized as a Top 35 Innovator under the Age of 35 by MIT Technology Review, he received the President Harry S. Truman Distinguished Postdoctoral Fellowship from Sandia National Laboratories, the BASF/Volkswagen Science Award for Electrochemistry, the Camille Dreyfus Teacher-Scholar Award, and an NSF Career Award.