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Review of EELS over the last 50 years by Christian Colliex

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In this special volume, we are deeply honored to publish an extensive review, by Christian Colliex, of the development of Electron Energy Loss Spectroscopy (EELS) in a Transmission Electron Microscope (TEM). During his career as a CNRS researcher in the Electron Microscopy group at the [Solid State Physics laboratory](#) in Orsay (France), that he led for over 35 years until 2009, Christian Colliex’s research was focused on the development of new instrumentation for local analysis in materials at the atomic scale. Dr. Colliex has also been a researcher at the Cavendish Laboratory and overseas Fellow at Churchill College, Cambridge (1976), visiting professor at ASU (1985), and IBM researcher at Almaden, San Jose (1986). He has also been affiliated to the Brockhouse Institute of Materials Research at McMaster University, Hamilton (Canada).

Christian Colliex was President of the International Federation of Societies for Microscopy (IFSM) between 2007 and 2011. During the International Microscopy Congress 19 in 2018 in Sydney, he received the “Vernon E. Cosslett” medal (New Developments in Optics and

Instrumentation) to award his outstanding contribution to electron microscopy.

He created the journal “Microscopy, Microanalysis, Microstructure” in 1990, which later merged with the “Journal of Physics” to become EPJ AP. Since then, many of the Editors-in-Chief of EPJ Applied Physics have also been members of the French Society for Electron Microscopy ([Sfmu](#)). Today, EPJ Applied Physics is mainly devoted to applied physics in the field of materials sciences, with a section dedicated to Instrumentation for characterization, dealing with Microscopy and Spectroscopy techniques. We warmly thank Dr. Colliex for this contribution that will undoubtedly become a major reference for researchers in the electron microscopy and materials science community.

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