

## Biographical details

Federico Rosei received MSc (1996) and PhD (2001) degrees from the University of Rome “La Sapienza”. He held the Canada Research Chair (Junior) in Nanostructured Organic and Inorganic Materials (2003–2013) and since May 2016 he holds the Canada Research Chair (Senior) in Nanostructured Materials. He is Professor at the Centre Énergie, Matériaux et Télécommunications, Institut National de la Recherche Scientifique, Varennes (QC) Canada, where he served as Director from July 2011 to March 2019. Since January 2014 he holds the UNESCO Chair in Materials and Technologies for Energy Conversion, Saving and Storage.

Dr. Rosei’s research interests focus on the properties of nanostructured materials, and on how to control their size, shape, composition, stability and positioning when grown on suitable substrates. He has extensive experience in fabricating, processing and characterizing inorganic, organic and biocompatible nanomaterials. His research has been supported by multiple funding sources from the Province of Quebec, the Federal Government of Canada as well as international agencies, for a total in excess of M\$ 16. He has worked in partnership with over twenty Canadian R&D companies. He is co-inventor of three patents and has published over **330** articles in prestigious international journals (including *Science*, *Nature Photonics*, *Proc. Nat. Acad. Sci.*, *Adv. Mater.*, *Angew. Chem.*, *J. Am. Chem. Soc.*, *Adv. Func. Mater.*, *Adv. En. Mat.*, *Nanolett.*, *ACS Nano*, *Biomaterials*, *Small*, *Phys. Rev. Lett.*, *Nanoscale*, *Chem. Comm.*, *Appl. Phys. Lett.*, *Phys. Rev. B*, etc.), has been invited to speak at over **320** international conferences and has given over **240** seminars and colloquia, over **55** professional development lectures and **40** public lectures in **45** countries on all inhabited continents. His publications have been cited over **13,250** times and his H index is **59**.

He is Fellow of numerous prestigious national and international societies and academies, including: the Royal Society of Canada, the European Academy of Science, the African Academy of Sciences, the World Academy of Art and Science, the World Academy of Ceramics, the Academia Europaea, the American Physical Society, AAAS, the Optical Society of America, SPIE, the Canadian Academy of Engineering, ASM International, the Royal Society of Chemistry (UK), the Institute of Physics, the Institution of Engineering and Technology, the Institute of Materials, Metallurgy and Mining, the Engineering Institute of Canada, the Australian Institute of Physics, Honorary Fellow of the Chinese Chemical Society, Foreign Member of the Mexican Academy of Engineering, Foreign Member of the Bangladesh Academy of Sciences, Senior Member of IEEE, Alumnus of the Global Young Academy and Member of the Sigma Xi Society.

He has received several awards and honours, including the FQRNT Strategic Professorship (2002–2007), the Tan Chin Tuan visiting Fellowship (NTU 2008), the Senior Gledden Visiting Fellowship (UWA 2009), Professor at Large at UWA (2010–2012), a Marie Curie Post-Doctoral Fellowship from the European Union (2001), a junior Canada Research Chair (2003–2013), a senior Canada Research Chair (2016–2023) a Friedrich Wilhelm Bessel Award from the Alexander von Humboldt foundation (2011), the Rutherford Memorial Medal in Chemistry (Royal Society of Canada 2011), the Herzberg Medal (Canadian Association of Physics 2013), the Brian Ives lectureship award (ASM international / Canada Council 2013), the Award for Excellence in Materials Chemistry (Canadian Society for Chemistry 2014), the NSERC EWR Steacie Memorial Fellowship (2014), the José Vasconcelos Award for Education (World Cultural Council 2014), the IEEE NTC Distinguished Lectureship 2015–2016, the Lash Miller Award (Electrochemical Society 2015), the Chang Jiang Scholar Award (Government of China), the Khwarizmi International Award from the Iran Research Organization for Science and Technology (IROST), the Recognition for Excellence in Leadership from the American Vacuum Society (2015), the Selby Fellowship from the Australian Academy of Sciences (2016), the John C. Polanyi Award (Canadian Society for Chemistry 2016), the Outstanding Engineer Award (IEEE Canada 2017), the President’s Visiting Fellowship for Distinguished Scientists (Chinese Academy of Sciences 2017), the Sigma Xi Distinguished Lectureship (2018–2020), the Sichuan 1000 talent (short term) award, the Lee Hsun Lecture Award (2018), the Changbai Mountain Friendship Award (2018), the IEEE Montreal Gold Medal (2018), the APS John Wheatley Award (2019) and the Blaise Pascal Medal (European Academy of Science 2019).