If there were Academy Awards in the field of electrochemical material science, Stanko Brankovic, associate professor of electrical and computer engineering at the Cullen College and past chair of the materials science division of the International Society of Electrochemistry, would be taking home an Oscar. He’s been named the 2017 winner of the Electrodeposition Division Research Award by The Electrochemical Society (ECS), known as the top organization globally for scientists and engineers with more than 10,000 members from over 100 countries.

Electrodeposition is the electrochemical process of synthesizing a thin layer of metal on top of a different substrate, or conducting surface, to modify its external properties. It provides the basis for an array of industrial applications, including refining and metal plating.

The award places Brankovic among a small group of electrodeposition leaders around the world, recognizing his success in straddling the boundaries between nanoscience and nanotechnology and working in some of the discipline’s most significant areas: magnetic materials and devices, and surface-limited reactions for catalysis and other applications.

Brankovic recently discovered the controlling phenomena of speed in which catalysts are formed, which may result in building better catalysts, the fundamental substance that speeds up reactions in all industries from petrochemical to manufacturing.

Of the award Brankovic said, “It’s a hardcore scientific contest where they evaluate your impact in the field and for this I am very flattered.”

The feeling for Brankovic among his peers is not simple flattery, but uncompromising admiration for the man.
who created no less than an entire new field of study. Proof comes in the comments of five professors around
the world who nominated him for the prestigious award.

?He contributed critically to electrocatalysts science and technology by inventing (and patenting) the use of
atomic monolayer deposition on nanoparticles and, with that, de facto created the now-flourishing field of core-
shell electrocatalysts,? said Plamen Atanossov, Distinguished Professor of chemical and biological engineering
at the University of New Mexico.

Jay Switzer, Donald L. Castleman/FCR Missouri Endowed Professor of discovery in chemistry at the Missouri
University of Science and Technology noted Brankovic?s ability to bridge different areas of science with his
magnetic materials research: ?In the area of magnetic material electrodeposition, I would rate him as one of the
top three researchers in the world.? 

Daniel Schwartz, ECS Fellow, ELDP Research Awardee and Boeing-Sutter Professor of chemical engineering
at the University of Washington, added that Brankovic ?seems to have a depth of knowledge that is boundless.? 

Said Brankovic, ?I am proud that the people who nominated me recognized that I may have changed the
electrochemical material science field with my work for the better.? 

About the award

Established in 1979, the Electrodeposition Division Research Award recognizes outstanding research and
encourages publication of high quality papers in the Journal of The Electrochemical Society.

The annual winner has made a recent outstanding achievement in, or contribution to, the field of
electrodeposition.

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