

Orlin D. Velev

Short bio and research interests

Dr. Orlin Velev received M.Sc. and Ph.D. degrees from the University of Sofia, Bulgaria, while also spending one year as a researcher in Nagayama Protein Array Project in Japan. After graduating in 1996, Velev accepted a postdoctoral position with the Department of Chemical Engineering, University of Delaware. He initiated an innovative program in colloidal assembly and nanomaterials and was promoted to research faculty in 1998. In 2001 formed his new research group in the Department of Chemical and Biomolecular Engineering, North Carolina State University, where he was promoted to an Associate Professor with tenure in 2006, to full professor in 2008 and to INVISTA chaired professor in 2009. He has contributed more than 180 publications, which have been cited more than 12,200 times, and has presented more than 210 invited presentations at major conferences and at universities and companies. Recent awards include NSF Career, Camille Dreyfus Teacher-Scholar, Sigma Xi, NC State Alcoa Distinguished Engineering Research, NC State Innovator of the Year, Springer Colloid and Polymer Science Lecture Award and election to an ACS Fellow. Velev has served as member of the Editorial Advisory Boards of *Langmuir*, *Chemistry of Materials*, *Biomicrofluidics* and *Particle*.



Velev has established a record of innovative research in the area of nanostructures with electrical and photonic functionality, biosensors, microfluidics and nanomanufacturing. He has been the first to synthesize "inverse opals", one of the most widely studied types of photonic materials today. Velev has also pioneered techniques for making novel nanoparticle materials, Janus particles, rod-like particles and responsive foams. Technologies based on his research have formed the basis of two Research Triangle Area startup companies, *Xanofi* and *Benanova*. He has been an advocate of incorporating the latest achievements in the areas of nanoscience and nanotechnology in the engineering curriculum.

Velev group web-page: <http://www.che.ncsu.edu/velevgroup/>

Velev faculty page: <http://crystal.che.ncsu.edu/>