**Short Bio:** Dr. Nazemifard is an associate professor of Chemical Engineering at University of Alberta, Canada. She received her BSc in mechanical engineering from University of Tehran and her MSc and PhD in mechanical engineering from University of Alberta. Her PhD work on fractionation of DNA molecules in a microfluidic device won her the NSERC Alexander Graham Bell Award which is the most prestigious graduate student award in Canada. After finishing her PhD in November 2010, she joined the Department of Chemical and Materials Engineering at University of Alberta as an assistant professor in January 2011. She leads a vibrant research group studying transport phenomena in micro/nano scale environment and electrokinetics with a focus on energy processes and applications. Her research group has been funded through federal, provincial, as well as industrial companies such as; Canada Foundation for Innovation (CFI), the Natural Sciences and Engineering Research Council of Canada (NSERC), Alberta Innovates Technology Future (AITF), Dow Chemicals, Imperial Oil, and Suncor Energy Inc.