HESSLER, Filip 08/01 – 10/31, 2011 PhD student, Faculty of Science, Charles University in Prague



I had the great opportunity of working at the Institute for Chemical Research in the laboratory of Professor Nakamura under the support of ICR fellowship for short-term visit of young researchers. The aims of the study in his group are overwhelmingly wide, ranging from synthesis and modification of natural compounds and their analogues, development and studies of mechanisms of various reactions catalyzed predominantly by nickel and iron to computational chemistry. The task I have been dealing with was the investigation of cross-coupling and 1,4-addition reactions catalyzed by iron. These iron catalyzed reactions pose a very appealing challenge and can have an extensive impact on organic synthesis. The interesting results that I obtained would not have been possible without excellent equipment and brilliant suggestions from my colleagues. The city of Kyoto is a remarkable place where the spirit of ancient Japan is mixed with the modern way of life. Drinking the world famous Uji green tea and enjoying the beauty of the surroundings provided the best stimulation and refreshment for further work. My stay was enriching and I am very grateful for the period I had the chance to work at ICR.