**Substantiation of the Proposal of Credit Mobility AUSTRALIA – Prof. Barek**

1. **Aim of this pilot project** is to create conditions for establishing effective and productive cooperation between UNESCO Laboratory of environmental electrochemistry with top Australian laboratories headed by prof. Gooding (University of New South Wales) and by prof. Bond (Monash University) in the field of development of electroanalytical methods for determination of trace amounts of biologically active organic compounds in various environmental and biological matrices. Czech side would profit from the experience of Australian laboratories in the field of nanomaterials and nanomedicine, Australian side from the experience of Czech researchers in practical application of modern electroanalytical methods on biological and environmental samples. Prof Barek is in regular contact with both Australian professors via his membership in steering bodies of Division of Analytical Chemistry of European Association for Chemical and Molecular Sciences and European Association for Electroanalytical Chemistry. It can be assumed that this pilot project will result in fruitful cooperation, joint papers, joint international projects and exchange of PhD students and joint PhD projects including cotutell.

2. **Interest of both sides on this mobility project.** Prof. Barek has good contacts with both Australian laboratories because of his aforementioned extensive international activities. Moreover, there used to be intensive cooperation of UNESCO laboratory of environmental electrochemistry with Australian laboratories, even thou mostly via J. Heyrovsky Institute pf Physical Chemistry.

3. **Increase of the quality of research and development work at UNESCO Laboratory of environmental electrochemistry.** Both theoretical and experimental experience of Australian laboratories undoubtedly enriches research at UNESCO Laboratory of environmental electrochemistry at Faculty of Science of Charles University in Prague from experimental, methodical and theoretical point of view.

4. **Great experience of both sides in international cooperation** is obvious from both extensive international contacts of Australian laboratories and from the fact that UNESCO Laboratory of environmental electrochemistry is among the most active units at Faculty of Science of Charles University in the field of sending out and accepting of students in ERASMUS exchange programs.