STER WORKSHOP FOR DOCTORAL STUDENTS!

„Role of international exchange in the XXIst century science – examples"

„Znaczenie wymiany międzynarodowej w nauce XXI wieku – przykłady"

Date: September 28th (Wednesday), 2022, 10:00-14:00

Venue, N. Copernicus University, **Faculty of Mathematics and Informatics**, Chopina 12/18 street,

Room: Aula

Idea:

In XXI century communication between scientists from different places and with different backgrounds is technically easier than ever. Many research groups develop unique research methods that may allow for break-through discoveries, but often they are located in foreign countries. Competition is strong and sometimes it is a good driving force for the progress. However, a simple observation of top-tier papers shows that collaboration is extremely important factor contributing to new knowledge. Unfortunately, the international scientific exchange is not easy, takes money, time, effort and risks.

During this workshop we want to discuss advantages of the cooperative research over studies done in close academic settings. Exchange of ideas brings often new approaches, insights stimuli and better training and quality of PhD theses. The lectures presented by a group of renewed international scholars will give audience a broad perspective of pro- and cons- of international scientific cooperation, and may encourage to overcome mental barriers hampering such activities of doctoral candidates.

Program:

10:00 - Coffee

10:15 Prof. dr hab. Katarzyna Hrynkiewicz, Head of NAWA/STER PhD@NCU project – Welcome

10:20 Prof. Bruno Lapied, Laboratoire Signalisation Fonctionelle des Canaux Ioniques et des Récepteurs , University of Angers, France

"International collaboration: An efficient tandem to promote better research output"
Q&A – around 10 min

Prof. Bruno Lapied works at the border between biology and neuroscience. Using such techniques as patch-clamp electrophysiology, calcium imaging and molecular biology methods he studies processes in neurons of insects, in particular in ion channels. His research has a great meaning in control of mosquito borne diseases such as malaria that affect millions of people every year.

11:00 Prof. Andres Ayuela Fernandez, CENTRO DE FÍSICA DE MATERIALES, Donostia-SanSebastian, Spain

"Concrete problems from a quantum point of view"
Q&A – around 15 min

Dr Andres Ayuela currently works at one of the most advanced research institutes in Spain. His scientific interests are very wide: He works on advanced quantum modeling of nanomaterials, such as nanotubes or graphene, magnetic properties of matter and cements used in construction works. His papers were cited over 6000 times (H>45).

12:00 Prof. Kang Li, Faculty of Engineering, Department of Chemical Engineering, Imperial College, UK

"*Membranes: how good it is to separate! (sometimes ☺)*"
Q&A – around 15 min

Prof. Kang Li has been working for many years as a scientists in Chemical Engineering Department, National University of Singapore, but since 2007 He is a professor at Chemical Engineering Department, Imperial College London. He published papers cited over 22 000 times (H>70) and is co-author of numerous patents. Prof. Kang Li current research focuses on the development of various hollow fibre membranes and membrane systems for fluid separations/reactions. He is particularly interested in developing fundamental understanding of the relationship between the membrane structure and its characteristic separation properties.

12:45 Summary; A panel discussion

Here we will have a discussion between foreign lecturers and directors of NCU doctoral schools regarding advantages of having long term research visits in other universities, international collaborations via ne, problems related to "inbreeding" and advices how to plan your carrier at early stages. *(graphics: Canterbury,* Gareth Ward)

~13:00 – Lunch (on the site), discussion among PhD students in small groups