# Benouadah Nacera

My name is Benouadah Nacera, a PhD student in ecomaterials science engineering at the University of M'Hamed Bougara (Boumerdès, Algeria). I have a MSc degree in organic and macromolecular process engineering and also an engineering degree in chemical analysis from the same university. I have received a scholarship at the Johan Gadolin Process Chemistry Center (PCC) for a period of nine months, under the supervision of Docent Andrey Pranovich. My primary research interest is the characterization of hemicelluloses from different Algerian wood species (Pinus Halepensis, Eucalyptus Camaldulensis, and Date Palm Phoenix-dactylifera-L). As a result, we studied extractives and chemical composition of wood using modern and sophisticated equipment, involving at the same time the strong background of my supervisor in dealing with different aspects of wood chemistry. Turku is a good place to live; it is pleasant, peaceful setting offering a wide range of



accommodations and amenities. Abo Akademi University is the best place to get the information which enables scholars to take advantage of their advanced acquired know-how.

#### Jonathan Barnsley

I am Jonathan Barnsley, a PhD Candidate at the University of Otago New Zealand. I grew up on a small family farm in a southern part of the South Island. At high school, I found an interest in science, particularly physics and chemistry. At university, I studied chemistry and computer science where I found an excellent group of fellow students and mentors. My honours' project entailed spectroscopy of organic dyes for use in organic photo-voltaics under the supervision of Professor Keith Gordon. My time at university was highly enjoyable for a multitude of reasons the most prominent being an utter open-mindedness to new ideas and possibilities. After a break, I signed up for a PhD continuing my organic dye work with Keith, of which I currently have 11 months left. My background is in Raman spectroscopy and computational chemistry, the latter of which has been used to investigate ion binding energies for a number of polymer and porphyrin systems. This work has been conducted in conjunction with electrochemistry carried out



by Grzegorz Lisak and Narender Joon at the PCC. I felt fortunate to have spent an extended stay at Åbo Akademi, where I met a number of very intelligent and friendly fellow scientists. The level of science is well reflected in the excellent Åbo divisional meetings, which I recommend to anyone. I can't wait to go back!

### Barbara Kovács

My name is Barbara Kovács and I am from Hungary. I am working in the Pharmaceutical Institute of Szeged as a PhD student. In the enzymatic laboratory, I managed to separate the enantiomers of secondary amines through a lipasecatalyzed enantioselective N-acylation. Here, in Finland, our aim has been to develop a new method for the racemization of these secondary amines. I investigated these processes with the use of metal catalysts. The project was carried out successfully. This six-month scholarship gave me a lot of experiences, including work and private life. I have developed a lot within synthetic chemistry and I have learned how to use some new instruments. I met many other foreigners here and I managed to get to know different cultures. Being alone abroad for six months has changed my character completely; I have become much stronger and more confident. If you have a chance to receive a scholarship, it would be worth applying for it. I am sure, you wouldn't regret it. I appreciate for the opportunity to take part in this program.



#### Silvia Palano

I am Silvia Palano and have a master's degree in Chemical and Process Engineering from the University of Padova (Italy). I have a genuine interest in research and a firm determination to explore new fields of science and technology. My training is based on the design capability and management of conventional chemical and process plants (petrochemical and pharmaceutical) and industrial safety. It was a great opportunity and a pleasure to work in the Laboratory of "Teknisk kemi och reaktionsteknik". I carried out many experiments and tested different catalysts in a trickle bed reactor of direct synthesis of hydrogen peroxide. The advantage is the lack of hazardous products, but there is one drawback to keep in mind: the wide range of flammable limit of the reactant mixture  $H_2/O_2$ . The peculiarity of this work is to introduce for the first time a new structure for the metallic catalyst, carbon foam derived from melamine. The catalytic tests showed the ability of the new catalyst to be tailored for the H<sub>2</sub>O<sub>2</sub> direct synthesis. The Johan Gadolin



Scholarship program is well structured and functional. It allows both intercultural and scientific exchange. The city and the university make you feel comfortable here in Finland.

#### Thomas Zweckmayer

I am Thomas Zweckmayer coming from BOKU University Vienna, Austria where I have been working as a PostDoc in the field of cellulose chemistry as well as analytical chemistry over the last couple of years. I was joining the Johan Gadolin Process Chemistry Centre, Institute of Wood- and Paper Chemistry in April 2016. At PCC, I worked on the isolation of TEMPO-oxidized GGM-oligomers and analytical methods was developed to analyze the compounds isolated. PCC appears as an integral disguise which bundles all activities in the field of process chemistry at Åbo Akademi University. It is equipped with state-of-the-art infrastructure such as NMR-instruments which allows scientists to work almost independently. PCC serves as a common platform which facilitates brisk exchange between all the groups participating as well as the international scientific community. Living in Åbo, Finland was a very nice experience. Student apartments are available in walking distance at an affordable price. All essential infrastructure



such as shops etc. is located in the city center of Åbo. Nice restaurants and bars are available as well. I highly recommend visiting PCC at Åbo Akademi University as a scientist where nice infrastructure is available to conduct cutting-edge research.

## Vincenzo Russo

My name is Vincenzo Russo and I was born in Naples, Italy, on 2nd of May 1985. On the 9th of May 2014, I got my PhD title in Chemical Sciences in the Chemical Sciences Department of the University of Naples "Federico II", with a thesis entitled Kinetic and Catalytic Aspects in Propene Oxide Production. It dealt with the synthesis of propene oxide subject, from propene and hydrogen peroxide in the presence of TS-1 catalyst, by investigating both the kinetic and catalytic aspects. As a Post-Doctoral Researcher at the same university a few more years after my graduation, I won a scholarship at Åbo Akademi University (Turku, Finland) working on multiphase reactors modelling. The Johan Gadolin Scholarship gave me the opportunity to grow in the Chemical Engineering Science field, because of the contact with an excellent research group. The cooperation with the researchers was great and fruitful, and of course it is far to be ended. In fact, the side and very positive effect of this period was to establish and strengthen the cooperation



between my research group in the University of Naples Federico II and the Laboratory of Industrial Chemistry and Reaction Engineering, heading to Åbo Akademi.

# Zdenka Jarolimova

My name is Zdenka Jarolimova and I am currently a PhD student in the group led by Professor Eric Bakker at the University of Geneva (Department of Inorganic and Analytical Chemistry), Switzerland. My main research interest focuses on the development of chemical sensors based on the Solid-Contact Ion-Selective Membrane electrodes and Ionophore-based Ion Selective Optical Nanosensors. During my stay at the Johan Gadolin Process Chemistry Center, my work was focused on the experimental study of a novel signal transduction principle for SC-ISEs introduced by Professor Johan Bobacka in 2014. The novel technique is based on constant potential coulometry and uses the redox capacitance of the internal solid-contact of the ion-selective membrane electrode to convert changes in ion activity into an electrical current (and charge) readout. It was an unforgettable experience to live in Finland. I was working with nice, friendly and helpful people. I appreciate their help, support and great advices. It



was a pleasure to work in such a friendly environment that was reigning at workplace. Do not hesitate to apply, you will enjoy every single moment and you will not regret it.

# Zuzana Vajglová

My name is Zuzana Vajglová and I am from the Czech Republic. I recently graduated with a PhD degree from the University of Chemistry and Technology Prague in Czech Republic. My scientific focus is in microreactor technology and I have worked at the Institute of Chemical Process Fundamentals of the Czech Academy of Science already for 9 years. I applied for the JG scholarship at Åbo Akademi, because I wanted to gain new experiences, a much broader view of current events and new approach to solving the issues that interest and fulfill me (heterogeneous catalysis, microreactor technologies, kinetics, transport phenomena...). All of this was fulfilled. My postdoc fellowship in Finland confirmed that personal practical work experience abroad is invaluable. I gained knowledge and new skills that I would like to use for further research work in my home country. Moreover, a postdoctoral fellowship can be the first step to open a space for the further mutual cooperation. In my opinion, Åbo Akademi University in Finland is the perfect



place for the scholarship. I met a lot of people who were very helpful and kind. I have only positive memories from my stay.