## A NEW RAIL CONFERENCE IN NEWCASTLE: RAILNEWCASTLE CONFERENCE 2015

A new rail-focused conference was held on the campus of Newcastle University from 15<sup>th</sup> to 17<sup>th</sup> July 2015. This 3-day international Conference was organised by NewRail – Newcastle Centre for Railway Research at Newcastle University in collaboration with the International Union of Railways and UIC Global Network of Railway Talents.

The Conference gathered academics, students and professionals involved in rail research projects and courses who represented over 20 countries from Europe (Austria, the Czech Republic, Croatia, Germany, France, Italy, Latvia, Poland, Portugal, Romania, Slovakia, Spain, Switzerland, United Kingdom and others) and beyond (Australia, Brazil, China, Thailand).

In the opening speeches, Dr John Appleby, Head of the School of Mechanical and Systems Engineering, Professor Mark Robinson, director of NewRail and Dr Marin Marinov, Rail Education Group Manager at NewRail, welcomed all attendees in the North East of England and wished them a fruitful conference.

The opening session was enriched with a series of four keynote speeches. The session started with a talk by Professor John Roberts from Kasetsart University (Thailand) on "Development of a European Community Rail Authorisation process". Next, Professor Baomig Han from Beijing Jiaotong University (China) delivered a video presentation on "State-of-the-art of urban rail transit in China". Mr David Prescott from Allan Rail Solutions Ltd. (United Kingdom) gave the third keynote speech on "A great idea – who wants it and how do they know that they want it?". The final talk by Dr Janene Piip from JP Research and Consulting (Australia) was on "Leadership talent: a study of the potential of people in the Australian rail industry".

The first two days of the Conference were divided into five scientific sessions on: (1) Rail operations, management and economics, (2) Rail engineering, (3) Urban rail transit and light rail, (4) Rail freight and logistics, and (5) Leadership and learning in the railway industry. In addition, a dissemination session as well as a students' session were included in the programme.

The first scientific session focused on research topics in the field of: energy-efficient speed profiles, train driving styles, operation of mixed traffic network, simulation modelling, plan and schedule management and economic viability of rail. In the second session research topics included: dynamics and running safety, crash safety, quality standards, smart travel agent, simulation of dynamic analysis and industry roadmap for rail. The third session focused on research in the field of: efficiency of train passenger boarding, barriers to urban rail energy efficiency, public perception



Professor Mark Robinson (director of NewRail), Dr Marin Marinov (Rail Education Group Manager at NewRail), Dr John Appleby (Head of School of Mechanical and Systems Engineering)

of driverless trains, passenger's stability in trains, pedestrian unsafe crossing and ergonomics of drivers in metro systems. In the fourth session research topics were: futuristic multimodal business model, organization of railway freight transport, modal shift from road to rail, single wagon loads to private sidings, security in transport of dangerous goods and adapted cost-benefit analysis for innovative railway services. The fifth session focused on research of: young rail enthusiasts in academic activities, training of teachers for railway topics and cooperation between academia and industry.

The final day of the Conference was dedicated to Railway Talents networking and collaborative event, delivered in collaboration with International Union of Railways. Mr Jean-Pierre Loubinoux, director general of UIC, delivered a welcome video which was followed by a welcome address and introduction to the Railway Talents projects and online platform presented by Mrs Nathalie Amirault, Head of Unit Expertise Development at UIC.

The opening session was organised around two keynote speeches with Dr Janene Piip from JP Research and Consulting (Australia) talking about Talent management and policies and practices across the world and sectors and Mr Roy Rowlands from Rail Technology Magazine (United Kingdom) who delivered a talk on how his media business with rail focus engages with young people to promote careers in the rail industry.

Next, after the two keynote speeches a speed-networking session was organised. The aim of the session was to introduce the participants to each other and prepare them for the following three workshops on: (1) How to attract and engage Talents?, (2) How to develop and grow Talents?, and (3) How to retain and commit Talents?. After lunch all participants were divided into groups, so that each group had at least one member from the students, academia, and industry target groups attending the day. By the end of the session each discussion group was expected to develop a proposal at national (set of recommendations for companies) and international levels (set of actions and next steps for the Global Network of Railway Talents), which they then presented to the audience. Examples of solutions given to the challenges discussed on the day put an emphasis on a close collaboration between academia and industry in order to grow new talents. The final session was led by Mrs Amirault who summarised the day and invited all participants to actively

contribute to the Railway Talents project in the future.

As a result of the Conference five special issues of scientific journals, which will include selected scientific papers presented at the Conference, are in preparation. Dr Marin Marinov said that "the RailNewcastle Conference 2015 was a great success" and hopefully the Conference will become a regular event.

Asist.Prof. Borna Abramović, Ph.D.
Faculty of Transport and Traffic Sciences
University of Zagreb
Anna Fraszczyk, Ph.D.
School of Mechanical and Systems Engineering
Newcastle University