



Press release – Innsbruck - 17. August 2015

## Highly recommended by the EU: The Proton Ionization Molecular Mass Spectrometry project “PIMMS”

A four year intersectoral and interdisciplinary training programme for Early Stage Researchers (ESRs) in analytical chemistry from 2012 to 2016, is soon coming to a successful end.

IONICON participates in the [PIMMS ITN project](#) and has been training two ESRs over the last couple of years in the [PTR-MS technology](#) and related topics.

### Training of scientists on the job

By early 2016, 15 young scientists will become available for the job market all of whom have unique portfolios of interdisciplinary and intersectoral technical, business and personal skills, making them highly employable within the growing knowledge-based job market in Europe.

According to the project coordinator Dr. Chris Mayhew from the University of Birmingham, this is the major and most important outcome of the Marie Curie Initial Training Network “PIMMS”.

PTR-MS has truly advanced our understanding of bioscience, atmospheric chemistry and food sciences, to name but a few areas of application. It is a unique instrument and thus the resulting increase in the use of PTR-MS technology and the growth in its applications was outstripping the supply of suitably qualified scientists.

### The project

12 full partners and four associate partners are working together, helping the ESRs to develop the skills necessary for the use of primarily PTR-MS, but also other more traditional analytical techniques (e.g. GC-MS and Ion Mobility Spectrometry). ESRs have been provided with extensive training in instrument optimization, communications and other transferable skills. Four key analytical areas are being addressed in PIMMS, namely the environmental, food and health sciences and homeland security.

The programme has resulted in a number of significant impacts, including an enhanced understanding of ion-molecule chemistry which has been used to improve instrumental selectivity, development of particulate sampling systems for atmospheric chemistry and new breath sampling systems which have resulted in spectacular findings of importance to disease screening.

### What comes next

A new Innovative Training Network entitled “Ion-Molecule Processes for Analytical Chemistry Technologies” or simply IMPACT has recently been awarded. Chris Mayhew is again the coordinator and his goal is to make it another success story: “The idea is to continue the legacy of PIMMS, but to take the research in a new direction. PIMMS was more about PTR-MS and its applications, whereas IMPACT is focused on soft chemical ionisation instrumental development and involves not only PTR-MS but also related technologies. IMPACT will train 10 ESRs within an integrated partnership of commercial, governmental and academic organisations.” IONICON CEO Lukas Märk joins in: “IONICON will again be part of this training network and we look forward to working with Chris, our partners and 10 talented ESRs to join us in our mission to provide ultra-sensitive solutions for real-time trace gas analysis.”



## About IONICON

IONICON Analytik GmbH was founded in 1998 to commercialize the unique [Proton Transfer Reaction – Mass Spectrometry \(PTR-MS\)](#), recently adding the proprietary [Selective Reagent Ionization – Mass Spectrometry \(SRI-MS\)](#) technology.

Over 250 leading scientists, institutions and multinational corporations are among IONICON's customers. They rely on [PTR-MS instruments](#) for results in real-time at one out of a trillion parts (LoD < 1 pptv) but without time-consuming sample preparation procedures.

Learn more about IONICON [here](#).

## Resources:

IONICON PIMMS Website: <http://www.ionicon.com/information/projects/marie-curie-actions#pimms>

IONICON blog post: <http://blog.ionicon.com/2015/08/the-proton-ionization-molecular-mass-spectrometry-project-pimms/>

Official project website: <http://www.birmingham.ac.uk/research/activity/pimms-itn/index.aspx>

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