

Training

Whilst the need to detect trace amounts of gaseous compounds in various environments is the subject of intense global interest, to date most research is conducted by groups isolated within their own narrow disciplines. This is a major obstacle to overcoming current challenges associated with the workpackages and to the development of PTR-MS as a broad-based analytical tool. The various developmental deliverables expected as an outcome from this network and the urgent need to have highly skilled scientists trained in PTR-MS (and other) analytical techniques serves to demonstrate the highly timely nature of this network.

The **aim of the Training Programme** is to train ESRs in analytical research areas via a holistic, interdisciplinary, collaborative and intersectoral approach to overcome the above problems, by exploiting specific expertise and capacities of all of the partners so that the collective expertise within PIMMS can make a significant impact compared to partners working on their own. Our **Training Vision** is to develop ESRs with the necessary depth and breadth of experience in analytical science, combined with the transferable skills required to communicate and work effectively across disciplinary and sectoral boundaries that are relevant to the challenge of achieving trace gas detection of chemicals and understanding of the role of these chemicals in various environments. Wider **applied training** in mass spectrometry, analytical techniques, vacuum systems, and fundamental quantum chemistry etc., and more **generic training** in project management, communication (public and scientific), IT, proposal writing, thesis writing, creativity, IPR, project and time management, and entrepreneurial skills etc., will ensure the employability of our ESRs and not just in analytical chemistry.

The research projects and network training have been designed in consultation with all partners to ensure that the network's potential, capacities, intersectoral requirements (especially those of the private sector), projects and work packages will be fully exploited for the benefit of all involved over and above that which could be provided from the individual partners. This ITN will therefore provide **a comprehensive and coherent analytical training package that will deliver ESRs with a portfolio of interdisciplinary and intersectoral technical, business and personal skills so that they can engage fully with the growing knowledge-based job market in Europe.**

PIMMS training philosophy is that achieving the best development of ESRs depends upon establishing a coherent research programme that is highly integrated with training in specific research skills. Moreover, by exposure to Private Sector Partners the skills the researchers acquire will be matched with those expected by employers. We believe that this unique combination of training by the best European research groups, many of who are at the forefront of PTR-MS research and development, in topics highly relevant to the EU will be extremely attractive to the highest quality candidates.