Biography of **Valentina Colla**, Scuola Superiore Sant'Anna, TeCIP Institute

Valentina Colla Graduated in Enginnering in 1994 at the University of Pisa and got Her Ph.D. in Industrial and Information and Engineering at Scuola Superiore Sant'Anna (SSSA) in January 1998.

From 2000 until 2008 She was Researcher at SSSA and in 2001 She established a research team dealing with application of advanced digital technologies in process and manufacturing industries, with a particular focus on the steel sector, where she started Her activity in 1996 working on AI-supported material science and technology. In 2008, She became Technical Research Manager at SSSA.

Presently, Valentina Colla is responsible of the Research Center ICT-COISP of the TeCIP Institute of SSSA. Her research activity deals with simulation, modelling, management and control of industrial processes and data processing via traditional and Artificial Intelligence-based techniques. She holds a considerable experience in the development and implementation of advanced automation systems (including robotic systems) and digital tools and technologies in the steel sector. She also developed an intense research activity on technologies and approaches for reducing the environmental impact of the steel production processes, also by exploiting Machine Learning and hybrid intelligent approaches to modelling, monitoring and optimization tasks,.

She participated to 66 EU funded projects (8 as project coordinator) and in many projects funded by companies. She is an active member of the European Steel Technology Platform (ESTEP), where She is a member of the focus groups entitled "Smart Factory" and "circular Economy".

Valentina Colla is author and co-author of more than 350 paper published in international journals and conferences.