

Safety Training Program Fellow Profiles (2018)

Ms. Esma Toprak



Ms. Esma Toprak was hosted in April 2000 by BP Amoco Chemicals Inc., Naperville, IL., USA (Now INEOS)

Ms. Toprak, now retired, was Chief Chemical Engineer in the Department of Chemical Engineering as Boğaziçi University, Istanbul, Turkey. Esma was one of the 1st STP Fellowship trainees after the STP was re-established and re-vamped by Dr. Mark Cesa in 2000 and she was hosted in April 2000 by BP Amoco Chemicals Inc., Naperville, IL., USA (Now INEOS).

Esma extended her presentations on safety beyond the Universities and into industrial companies. The chemical industry is growing quickly in Turkey with about 4,000 producers; 70% of products are intermediate and raw materials, about 30% goes to consumers. In Turkey, the majority of accidents occur because of working conditions and lack of safety education, rather than personal mistakes. There are a number of root causes related to working conditions. Some groups are more vulnerable than others, with accidents more likely in textiles, mining, and dockyard industries. However, Turkey is adopting European Union (EU) technical standards. In June 2012, an OH&S law number 6331 was introduced, that covers the framework for safety, based on an EU directive. The Regulation outlines key elements that must exist and applies to all public and private sectors. It covers the powers responsibilities; e.g., the rights, and obligations of both employees and employers. Risk assessment, emergency procedures, medical examination of employees, and other issues are all covered. Environment, Health, and Safety (EH&S) experts are a growing profession due to this law. Penalties are defined and enforced. Esma is happy to see these regulations evolve, but there are still many improvements required throughout society and the chemical sector.

The full array of safety training, including the manuals which were used for employees in BP. Esma was able to take this home for use in her follow up.

Esma Toprak was one of the first millennium STP Fellows. She worked in the Chemical Engineering department as the Chief Chemical Engineer and Summer Training Coordinator.

Esma was trained in 2000 at BP Amoco Chemicals, now INEOS, in Naperville, Illinois, USA and has made significant impact at the Boğaziçi University, Istanbul, Turkey. During her training, she recognized a number of gaps at her home institution and has focused on addressing them. These include creating a department safety manual, short courses, seminars, and sharing best practices to students and staff; enforcing protective personal equipment usage; creating an EH&S team; investing in safety showers and eye washes; carrying out drills for fire and earthquakes; and creating lab/process unit safety binders. Finances were limited, so Esma went to the alumni advisory board and they provided support to purchase safety facilities and equipment. The transition to the use of Personal Protection Equipment was difficult, but it was established as routine expected practice. Esma collected feedback about the educational programs from the students themselves and feedback from company evaluations of interns. In addition, if the companies hosting interns are not following safety practices, the university works with them to improve practices (or else they will not place students there).

Esma's commitment to using her STP training at Boğaziçi University, and then later at other Universities around Turkey, was groundbreaking in Turkey. One of the interesting follow-up activities was that in her Chemical Engineering Department the students' results became contingent upon them taking the safety courses AND complying with the safety practices.

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Esma has been an excellent role model for later Fellows, especially those in Academic organizations. In addition to her leadership in safety, Esma volunteered to join the Committee on Chemistry and Industry first as a Titular Member and then as an Associate Member and attend all of the committee meetings, reporting on her progress. She also always brought a box of Turkish Delight to those meetings! Esma concluded her time on COCI and presented her last STP update at the IUPAC meeting in Istanbul in 2013. She also retired from the University in that year, and still keeps in touch with the STP. See her final report for more details.