## MACRO 2016, Istanbul: An IUPAC Morality Tale

## by Gregory T. Russell

y favorite statistic concerning risk is that one 60-year-old out of a million will die every twenty minutes [1]. If I am not mistaken, this equates to 26 300 deaths per million per annum—just from living.

Which brings me to the photograph below. I would like to offer some reflections inspired by it. It shows a group of people meeting on the campus of Istanbul Technical University. The group is the Subcommittee on Polymer Terminology, most of whom stayed on for an IUPAC Polymer Division meeting a few days later. We were all there because in the following week—to be precise, 17-21 July 2016—the 46th World Polymer Congress (WPC) was to take place in Istanbul. Also known as MACRO meetings, WPCs are biennial and are the flagship events of the IUPAC Polymer Division, one might say the Olympic Games of polymer chemistry.

The record attendance at a WPC is 2400 in Paris in 2004. When Istanbul was awarded the 2016 WPC, it was expected that this record would be challenged, such are the attractions, location, and affordability of this great city. In the end the attendance was 470, close to an order of magnitude below expectation. Furthermore, over half of these people were from the host country. What happened? It certainly was not down to the conference chair, Yusuf Yagci, who has charisma to burn, is an extremely well-known, and well-credentialed polymer chemist; he worked indefatigably to make the conference succeed. Nor was it down to the conference organizing company, for

Cem Tunçel and his Brosgroup showed themselves to be extremely competent at their job. What happened was that terrorism and political intrigue intervened.

Starting in January 2016, there were several bombings in Istanbul, two of which were terrorist attacks [2,3] designed to scare the western world, and one of which was an attack on Turkish police motivated by the Kurdish situation [4]. In total 17 foreigners were killed in these attacks [2,3]. Undeniably this is appalling. Nevertheless, 11.27 million people visited Istanbul in 2014, and this was projected to rise to 12.56 in 2015 [5]. So even in a really bad period, the level of risk from terrorist bombings in Istanbul is approximately 1.5 deaths per million per annum.

Yet with every 2016 attack, emails to Yusuf and me would flood in. Americans showed no awareness that the numbers in Istanbul paled beside 30 000 gun-related deaths per year in the USA. This is approximately 100 deaths per million per annum. Just from being in the USA. People from everywhere showed no knowledge that even the very safest countries in the world—Sweden and Switzerland, of course—have 30 deaths per million people per annum on their roads [6]. In the USA, this number is 106, much the same as the risk from guns. In Turkey it is 89, which equates to 1320 road deaths per annum for Istanbul's population. In other words, the roads in Istanbul are a far greater risk than the terrorists.

One of my favorite emails was from a person saying that terrorists would surely target the World Polymer Congress, as such an attack would make a huge statement on the world stage. This made me wonder whether Lionel Messi and FC Barcelona had been signed up as delegates without me knowing. Another person



12 July 2016 in Istanbul: (I to r) Roger Hiorns (France), Stan Slomkowski (Poland), Paola Carbone (UK), Melissa Chan (Malaysia), Olga Philippova (Russia), Jiasong He (China), Natalie Stingelin (UK), Michael Hess (Germany), Patrick Theato (Germany), Paul Topham (UK), Cláudio dos Santos (Brazil). Ram Adhikari (Nepal), Chris Fellows (Australia) and Jiazhong Chen (USA) gather in the name of IUPAC.

wrote that as the father of two young children, it was not conscionable for him to go. I wondered whether I should show this email to my own young children. Most people wrote of the need to stand up to terrorism, even as they excused themselves from attending. As if all this was not enough, the Atatürk Airport attack occurred on 28 June 2016, under three weeks before the start of MACRO 2016, killing 45 people; interestingly, not a single one of the dead was from a western country [7]. Finally, a coup d'état attempt took place on 15 July 2016 [8], just two days before the start of the WPC. Comprehensively reported in the world media, these two banner events provided an excuse for anyone to stay away. But were they fatal to the conference? Truth be known, it was already in mortal trouble before the airport bombing, with registrations at only about 670. The damage had largely been done by the relatively inconsequential events; the grand happenings were just the icing on the cake.

In view of all of this, it was a miracle that the conference took place at all. That it did is because of IUPAC, which was already meeting before the coup attempt, as evidenced by the photo above. We advised on the morning after the coup that the WPC should proceed, because to cancel at the last minute would not change the financial situation and would punish those who had made every effort against the odds. Also, it would make a positive statement.

So the WPC and the remaining IUPAC meetings went ahead, and they were as successful as they could have been under the circumstances. There was no sense of danger, which is not a surprise given that we had dined through the coup attempt on a beautiful Istanbul evening, we could see a traffi jam on a bridge below us, and we experienced this traffi on our bus trip home—it was cars being held up by soldiers—but we were oblivious to its cause. When we got back to our hotels and we learned of the coup attempt, we watched CNN. If a jet fl w overhead, we listened as reporters declared that bombs were being dropped, which was a blatant lie. I now have a keener understanding of sensationalism and what the media does to gain traction.

What is the point of this tale? I think it is as follows. I am a human being, and am prey to human forces. One of the reasons I am a scientist is so that I can hold the darker of these forces in check. I want to understand risk, so that I can use it to inform my actions. I want to be able to distinguish between hysteria and reality. I want to see my place in the world and I don't want to overrate my importance. I want to contribute

to a cause that genuinely promotes the betterment of mankind, and I want to stand up to forces that seek to undermine this good. Unexpectedly, the World Polymer Congress and IUPAC Polymer Division meetings of mid-July 2016 presented my IUPAC colleagues and myself with an opportunity to test ourselves in these regards. Pleasingly, by and large we stood firm. We even smiled for the photo. It was easy, because it's what we felt. I cannot conceive of a better advertisement for the IUPAC spirit, which is alive and flourishing in the Polymer Division, 50 years after its founding.

July 2016 also marked the centenary of the Battle of the Somme. 18 000 members of the New Zealand Division were involved in it. More than one in nine were killed, and one in three were injured [9]. That rather puts it all in perspective.

## **Acknowledgements**

I dedicate this article to the many Polymer Division troops who fronted up in Istanbul. In particular I pay tribute to Yusuf Yagci, who could not have worked harder to achieve success for MACRO 2016 and IUPAC in the face of insurmountable odds.

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Greg Russell is at the University of Canterbury, New Zealand. He is the current President of the IUPAC Polymer Division. He missed his daughter's 12th birthday while he was in Istanbul in July 2016. She understood.