## Reflections on my faith & its relation to science: a short talk for the pupils of Highgate School, for Science Week 2017.

It is very fortunate for me that I teach chemistry. For chemistry is a branch of natural science, which is based on experiments and their results. You only believe what you see.

Interestingly however, until some 300 years ago, for thousands of years, the study of nature had been based on beliefs, and **not** on experimentally determined facts. Our understanding of Nature thus constituted a form of **natural magic**: there were no explanations – just awe, wonder and respect. Then came **natural philosophy**: about 2000 years ago, the great Greek thinkers such as Aristotle, constructed a systematic body of knowledge, concerning the natural world. This body of knowledge however, was **based purely on reasoning and logic**: there was no experimental proof. The Greeks **believed** in the idea of the 4 elements, a quintessence and in transmutation. This **belief** formed the basis for explaining all phenomena in the universe.

During the 17<sup>th</sup> century, through the work of **natural scientists** such as Robert Boyle, modern science gradually came into being: **experiment**, **observation**, **conclusion**. Subsequently science became quantified through the application of mathematics and thus it became **exact**: scientific laws were established, which have enabled us to reach the remarkable state of knowledge and technology, which we have today.

So how did Szydlo, a chemistry teacher at Highgate School, come about?

I was born to Polish political émigré parents not long after the end of the 2<sup>nd</sup> World War. They were Roman Catholics and they brought me up in that faith, and in the traditions and ceremonies, which are associated with that faith. **I am thus a cradle Catholic**. When I was small, I used to go to church every Sunday to pray. I also used to pray, kneeling at my bedside, every day. My parents instilled in me a faith in Jesus Christ, an historical figure, who died on the cross to save humanity from evil. I did not try to **understand** the concept of God, I simply believed. And I learnt to pray, like my parents.

Today, nothing has changed for me. I still pray every day and I still go to church every Sunday to pray with other members of the Catholic community. Praying enables me to have a sense of purpose: I know **who** I am, **what** I am doing, and **why** I am doing it.

There is no conflict between my faith and scientific knowledge. There is also no conflict for the Catholic Church on this issue. The Argentinian Pope Francis has stated clearly: "The Big Bang, that is placed today at the origin of the world, does not contradict the divine intervention, but exacts it. The evolution in Nature is not opposed to the notion of creation, because evolution presupposes the creation of beings that evolve".

In 1937, in a lecture on "Religion and Natural Science", given by the great German physicist Max Planck, he stated that: "wherever we may look, far and wide, we nowhere find a contradiction between religion and natural science. Quite the contrary, precisely on the decisive points we find complete agreement. Religion and natural

science do not exclude one another, as some people today think or fear. They complement and define one another. Perhaps the most direct evidence for the fact that religion and natural science can live harmoniously side by side, even under the most exacting and critical examination, is the historical fact that precisely the greatest scientists of all ages, men like Kepler, Newton, and Leibniz, were deeply religious." To this list of great scientists, I will add one more, who was a devout Christian, and who is interred just half a mile from here in Highgate Cemetery, and to whom we owe the entire electrical engineering industry: Michael Faraday [1791 – 1867].

For me, no scientific advances will ever disprove the existence of God. You can neither prove nor disprove, you can choose to believe or not to believe.

So what do I, Andrew Szydlo, pray for in my daily dialogue with God? What do I pray for, how do I pray, and why do I pray? Naturally I pray for my immediate family, for their well being and for the fulfilment of their aspirations. At the same time, I recognize that in so doing, I am praying for the entire human race. This is because ultimately, biologically, every human being on this planet is related. We are all one family. And that is what the word "catholic" means. It is derived from the ancient Greek **katolikos**, which means universal. The Catholic faith is a universal one which embraces all human beings.

I pray for grace (inspiration/guidance) to fulfil my professional obligations to you, the pupils of Highgate School, and this I strive to achieve with all my colleagues at Highgate.

I also pray for grace and guidance to make wise decisions on an everyday basis. We make many decisions every day – some trivial, and some with a much more profound consequence e.g. which 3 biscuits shall I select to have with my coffee in the common room at break today, or which 3 A levels shall I do next year?

How do I pray? This can be a moment's thought for someone I may pass, who has just collapsed on the pavement on North Hill.

Praying gives me the confidence to face the events of every day – events which I can never predict.

My faith teaches me to recognise that I am imperfect, that I am a sinner, and that I must therefore **always** try to improve. It teaches me humility and respect – not only for others, but also for the entire natural world.

How does this approach to life fit in with Highgate School, its community and its ethos? The Highgate School motto, printed on the front cover of your diaries, "Altiora in Votis" means: "Higher things in prayer". On the inside cover, among the "Aims and Ethos", we read: our aim is to be a **reflective community.** 

DO create time for yourselves to think and to reflect. For as long as people think, as long as people reflect, there is hope for the future. YOU are that future.

Andrew Zbigniew Szydlo, Highgate School, 20th February, 2017